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# DEPARTMENT OF THE NAVY JUSTIFICATION OF ESTIMATES FOR FISCAL YEAR 1987

AD-A166 533



SUBMITTED TO CONGRESS FEBRUARY 1986

OPERATION & MAINTENANCE, NAVY

BOOK 2 OF 3

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BUDGET ACTIVITY 7:  
CENTRAL SUPPLY AND MAINTENANCE

AD-A166533

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<p>THIS VOLUME CONTAINS JUSTIFICATION MATERIAL SUPPORTING THE PRESIDENT'S FISCAL YEAR 1987 BUDGET PRESENTATION TO CONGRESS.</p>				
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# RUDGET ACTIVITY 7: CENTRAL SUPPLY & MAINTENANCE

## SUMMARY OF REQUIREMENTS BY ACTIVITY GROUP

	FY 1985			FY 1986			FY 1987			Book-BA-Page
	Personnel		O&M,N	Personnel		O&M,N	Personnel		O&M,N	
	Mil	E/S	Funding	Mil	E/S	Funding	Mil	E/S	Funding	
		Civ			Civ			Civ		
Naval Air Systems Command	729	5,369	2,846,015	778	5,426	2,526,862	874	5,425	2,303,463	2-70006
Aircraft Rework & Maint	0	0	1,785,258	0	0	1,325,965	0	0	1,230,545	
Air-Launched Weapons Rework and Maintenance	0	0	102,546	0	0	122,796	0	0	106,992	2-70013
Other Aviation Sys Maint	0	0	238,579	0	0	294,152	0	0	218,920	2-70025
Maintenance Support	0	0	26,133	0	0	30,682	0	0	30,536	2-70032
Procurement Operations	189	1,313	44,291	209	1,471	50,524	240	1,471	51,167	2-70038
Command and Administration	39	588	23,514	40	600	28,247	39	559	24,099	2-70043
Field Operations	499	3,458	285,417	515	3,355	273,543	581	3,395	271,152	2-70046
Logistics Support Activities	2	0	114,448	2	0	143,406	2	0	129,827	2-70054
Industrial Preparedness	0	0	2,391	0	0	923	0	0	384	2-70067
Engineering & Supt Services	0	0	101,843	0	0	107,694	0	0	94,197	2-70069
Contractor Technical and Maintenance Support	0	0	98,058	0	0	120,934	0	0	92,359	2-70078
ASW Systems Support	0	0	9,111	0	0	5,687	0	0	5,705	2-70082
Maintenance of Real Property	0	0	6,465	0	0	13,807	0	0	7,898	2-70088
Base Operations	0	0	7,961	12	0	8,502	12	0	39,682	2-70090
	1,355	10,346	1,847,054	1,496	9,901	2,007,539	1,659	10,200	2,227,637	
Naval Sea Systems Command										
Ship-Launched Weapons Rework and Maintenance	0	0	75,805	0	0	92,294	0	0	132,663	2-70094
ASW System Maintenance	0	0	154,385	0	0	173,571	0	0	184,656	2-70105
Other Ship Systems Maintenance	0	270	188,548	0	0	214,013	0	275	237,009	2-70111
Intermediate Maintenance	0	0	14,993	0	0	13,172	0	0	14,187	2-70134
Maintenance Support	0	55	141,561	0	61	180,521	0	61	190,507	2-70139
Procurement Operations	536	5,356	214,049	561	5,536	216,449	692	5,557	219,938	2-70163
Command & Administration	39	849	36,607	50	713	32,703	50	713	30,866	2-70173
Field Operations	679	3,705	181,282	713	3,480	175,526	725	3,483	172,108	2-70176
Logistics Support Activities	74	111	337,341	75	111	425,515	75	111	460,186	2-70185
Industrial Preparedness	0	0	0	0	0	1,152	0	0	1,027	2-70225
Engineering & Support Services	27	0	249,759	97	0	241,960	117	0	318,454	2-70228
Contractor Technical and Maintenance Support	0	0	54,424	0	0	45,336	0	0	52,778	2-70267
ASW Systems Support	0	0	126,094	0	0	122,171	0	0	131,805	2-70282
Maintenance of Real Property	0	0	13,364	0	0	15,463	0	0	20,639	2-70288
Base Operations	0	0	58,842	0	0	57,693	0	0	60,814	2-70291

**BUDGET ACTIVITY 7: CENTRAL SUPPLY & MAINTENANCE (CONT'D)**

**SUMMARY OF REQUIREMENTS BY ACTIVITY GROUP (CONT'D)**

	FY 1985			FY 1986			FY 1987			Book-BA-Page
	Personnel		O&M,N	Personnel		O&M,N	Personnel		O&M,N	
	Mil	E/S Civ	Funding	Mil	E/S Civ	Funding	Mil	E/S Civ	Funding	
Naval Supply Systems Command	2,378	21,674	1,223,614	2,066	20,818	1,265,652	2,014	21,872	1,348,608	
Supply Operations	292	8,265	245,398	303	7,982	279,681	351	8,503	308,587	2-70300
Inventory Control Operations	261	6,250	229,086	269	5,826	251,450	292	6,275	272,367	2-70308
Procurement Operations	123	663	57,747	145	611	53,160	156	661	61,177	2-70317
Command & Administration	74	389	31,071	77	323	30,270	76	324	37,211	2-70324
Field Operations	30	216	7,052	14	212	7,676	20	234	7,721	2-70327
Servicewide Transportation	0	0	398,678	0	0	384,818	0	0	384,088	2-70330
Retail Sales Operations	1,594	2,798	80,408	1,254	2,864	87,700	1,115	2,851	89,264	2-70337
Maintenance of Real Property	0	241	27,474	0	250	29,125	0	250	39,787	2-70342
Base Operations	4	2,852	146,700	4	2,750	141,772	4	2,774	148,406	2-70345
Naval Facilities Engineering Command	1,128	4,556	341,087	1,191	4,514	406,592	1,202	4,639	381,082	
Command and Administration	53	349	18,138	52	341	17,954	51	342	16,652	2-70351
Field Operations	129	1,122	58,030	167	1,265	103,264	170	1,237	84,712	2-70354
Logistic Support Activities	0	0	62,617	0	0	78,549	0	0	87,833	2-70361
Maintenance of Real Property	65	1,564	127,967	61	1,528	124,517	61	1,682	99,384	2-70371
Base Operations	881	1,521	74,335	911	1,380	82,308	920	1,378	92,501	2-70374
Space Warfare Systems Command	180	2,271	456,516	243	2,077	520,807	239	2,079	534,035	
Electronic Maintenance and Maintenance	0	0	62,066	0	0	79,197	0	0	79,005	2-70380
Maintenance Support	0	0	31,930	0	0	35,321	0	0	33,430	2-70388
Procurement Operations	45	886	40,139	53	864	37,937	53	866	37,312	2-70396
Command & Administration	13	180	7,308	15	158	6,747	15	158	6,728	2-70401
Field Operations	103	1,205	52,619	150	1,055	52,071	146	1,055	52,364	2-70404
Logistics Support Activities	0	0	33,151	0	0	39,884	0	0	37,595	2-70408
Industrial Preparedness	0	0	0	0	0	0	0	0	37	2-70418
Engineering & Support Services	0	0	72,190	0	0	74,426	0	0	86,835	2-70420
Contractor Technical and Maintenance Support	0	0	6,095	0	0	6,377	0	0	6,247	2-70446
ASW Systems Support	19	0	141,517	25	0	180,651	25	0	184,491	2-70449
Maintenance of Real Property	0	0	3,431	0	0	1,743	0	0	2,206	2-70455
Base Operations	0	0	6,070	0	0	6,453	0	0	7,785	2-70457

# BUDGET ACTIVITY 7: CENTRAL SUPPLY & MAINTENANCE (CONT'D)

## SUMMARY OF REQUIREMENTS BY ACTIVITY GROUP (CONT'D)

	FY 1985			FY 1986			FY 1987			Book-BA-Page
	Personnel	E/S	O&M,N	Personnel	E/S	O&M,N	Personnel	E/S	O&M,N	
	MIT	Civ	Funding	MIT	Civ	Funding	MIT	Civ	Funding	
<u>Office of Naval Acquisition</u>										
Support	317	792	85,418	359	753	55,903	358	810	60,994	
Command and Administration	35	170	19,168	34	121	8,915	30	121	8,198	2-70460
Field Operations	281	622	58,999	324	632	46,541	327	689	52,595	2-70462
Industrial Preparedness	0	0	6,812	0	0	0	0	0	0	2-70469
Base Operations	1	0	439	1	0	447	1	0	201	2-70471
<u>Chief of Naval Operations</u>										
(OP-09BF)										
Field Operations	14	0	26,678	0	0	27,223	0	0	37,946	
Maintenance of Real Property	0	0	26,617	0	0	27,223	0	0	25,729	2-70473
Base Operations	14	0	18	0	0	0	0	0	3,034	2-70486
			43	0	0	0	0	0	9,183	2-70488
<u>Administrative Assistant to the United States Navy</u>										
Command and Administration	0	49	2,414	9	49	4,536	9	29	13,009	
Field Operations	0	20	0	0	20	0	0	0	9,910	2-70491
Industrial Preparedness	0	29	2,414	9	29	3,686	9	29	2,449	2-70496
	0	0	0	0	0	850	0	0	650	2-70499
<u>Chief of Naval Operations</u>										
(OP-92)										
Industrial & Stock Fund	0	0	-576,900	0	0	-1,074,450	0	0	-825,477	
	0	0	-576,900	0	0	-1,074,450	0	0	-825,477	2-70501
<u>Exchange Personnel</u>										
Base Exchanges	150	0	0	169	0	0	169	0	0	
	150	0	0	169	0	0	169	0	0	
<b>Grand Total</b>	<b>6,251</b>	<b>45,057</b>	<b>6,251,896</b>	<b>6,311</b>	<b>43,538</b>	<b>5,810,664</b>	<b>6,524</b>	<b>45,054</b>	<b>6,081,297</b>	

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Department of the Navy  
Operations and Maintenance

BUDGET ACTIVITY: 7 - CENTRAL SUPPLY AND MAINTENANCE

I. Description of Operations Financed

This budget activity provides centrally managed maintenance, supply, technical, and other logistic and acquisition support for the Navy's operating forces and shore establishment. This support is provided by five Naval Systems Commands, the Navy Regional Data Automation Center (NARDACs) which operate under the direct command of the Chief of Naval Operations, the Office of Naval Acquisition Support and the Assistant for Administration for the Under Secretary of the Navy. Since the submission of the FY 1986 President's Budget Request, in FY 1985 both the Naval Materiel Command and the Anti-Submarine Warfare Project Office (ASWPO) have been disestablished. Those functions under the Naval Materiel Command that were not duplicative in nature and provided necessary programs to meet Navy mission requirements were consolidated into the Office of Naval Acquisition Support. The efforts performed under ASWPO were realigned to the proper systems command to continue those efforts. The majority of the ASW resources were split between the Naval Sea Systems Command and the Naval Space and Warfare Command. The Naval Air Systems Command picked up the ASWPO technical efforts related to air ASW efforts. Finally, the Naval Electronics Systems Command evolved into the Naval Space and Warfare Command. No programs transferred as a result of this action.

The FY 1987 budget for Central Supply and Maintenance finances efforts to improve readiness on ships, aircraft and major weapon systems and equipments. Of note, are increases in the areas of AEGIS systems, Point Defense, Search Radar Maintenance, Submarine ASW maintenance, Aircraft Rework, Long Range Missile Systems Maintenance, and Navy Tactical Data Suite (NTDS) refurbishments. Depot efforts for Long Range Missile Systems and NTDS refurbishment are specifically related to the ship overhaul program and deliverance of equipments already procured. In FY 1987, a total of three SSN submarines will be inactivated. This is an increase of one over the current FY 1986 program. As a result of Inspector General reports (Navy and DOD), a comprehensive program to eliminate the backlog of deficient technical manuals by the end of FY 1991 is being initiated in FY 1987. The elimination of deficient technical manuals will have a positive impact on readiness and will reduce the number of equipment units requiring depot repair. Due to the "pipeline effect" of getting updated manuals to the users, associated savings will be realized starting in FY 1988. The total savings, which are in excess of the total funding increases provided to eliminate the technical manual backlogs, will continue to grow each year as the backlog of deficient manuals decreases towards zero.

Additional funding and end strength has been provided to support the expansion of the Buy Our Spares Smart (BOSS) program. These efforts will increase the level of contracts awarded on a competition basis by 9.4 percent over the FY 1986 level. Increases in engineering will remedy design deficiencies and provide specification for repair of weapons, ship and aircraft systems. Of the several interappropriation transfers, most noted are transfers in for Base Operations Support of RDT&EN facilities, disposal of hazardous wastes by individual services vice DLA and a transfer out of environmental restoration efforts to the O&M,DA account.

Budget Activity: 7 - Central Supply and Maintenance

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Group Breakout

		FY 1986			FY 1987	
	<u>FY 1985</u>	<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	<u>Change</u>
Chief of Naval Operations (OP-09BF)	26,678	30,787	30,271	27,223	37,946	+10,723
Asst for Administration to the UNSECNAV	2,414	0	0	4,536	13,009	+8,473
Chief of Naval Operations (OP-92)	-576,900	-280,300	-1,074,450	-1,074,450	-825,477	+248,973
Naval Air Systems Command	2,846,015	2,384,215	2,386,280	2,526,862	2,303,463	-223,399
Naval Supply Systems Command	1,223,614	1,283,853	1,262,037	1,265,652	1,348,608	+82,956
Naval Sea Systems Command	1,847,054	2,109,402	1,981,848	2,007,539	2,227,637	+220,098
Naval Facilities Engineering Command	341,087	413,810	357,536	406,592	381,082	-25,510
Office of Naval Acquisition Support	85,418	70,506	55,501	55,903	60,994	+5,091
Space and Warfare Systems Command	<u>456,516</u>	<u>526,319</u>	<u>526,093</u>	<u>520,807</u>	<u>534,035</u>	<u>+13,228</u>
Total, Budget Activity	6,251,896	6,538,592	5,525,116	5,740,664	6,081,297	+340,633

Activity Group: 7 - Central Supply and Maintenance

B. Reconciliation of Increases and Decreases.

1. FY 1986 President's Budget	\$6,538,592
2. Congressional Adjustments	-1,013,476
A. Classified Pay Restoral	(50,237)
B. Wage Board Pay Restoral	(7,879)
C. NIF Pay Injection	(227,100)
D. Stock Fund Fuel Refund	(-148,850)
E. Industrial Fund Refund	(-140,000)
F. Foreign Currency	(-7,080)
G. Stock Fund Refund	(-732,400)
H. Expense/Investment Criteria	(-85,656)
I. Environmental Restoration	(-42,900)
J. Inflation Reestimate	(-3,792)
K. Base Operations Support	(-5,150)
L. Inactive Ship Rework	(-75,000)
M. Naval Sea Systems Command	(-17,000)
N. Automatic Data Processing	(-9,453)
O. Contract Studies	(-2,420)
P. Real Property Maintenance	(27,400)
Q. Depot Maintenance	(20,000)
R. Other	(-2,687)
S. Transportation	(-13,000)
T. Navy Material Command	(-15,000)
U. Aircraft Modification Installed	(-10,000)
V. P-3A Modifications	(3,000)
W. Civilian Work Year Reduction	(-38,704)
3. FY 1986 Appropriation	5,525,116
4. Functional Transfers	12,087
A. Transfers - In	(38,294)
1) Inter-appropriation	2,409
2) Intra-appropriation	35,885
B. Transfers - Out	(-26,207)
1) Inter-appropriation	-966
2) Intra-appropriation	-25,241

5. Other Increases	543,731
A. Programmatic	(543,731)
1) One-Time Increase	8,756
2) Other Increases	534,975
6. Other Decreases	-340,270
A. Programmatic	(-258,136)
B. Pricing	(-82,134)
1) Review of Unliq. Obs.	(-74,590)
2) Civilian Health Reduc.	(-5,517)
3) Audit Savings	(-2,027)
7. FY 1986 Current Estimate	5,740,664
8. Pricing Adjustments	387,967
A. Civilian Personnel Compensation (Direct)	(1,174)
1) Foreign National Direct Hire Pay Adj.	50
2) Other Direct Pricing Adjustments	1,124
B. Stock Fund	(469,288)
1) Fuel	318,903
2) Non-Fuel	150,385
C. Industrial Fund Rates	(-210,839)
D. Foreign Currency	(35,693)
E. FN Indirect	(317)
F. Average Grade Reduction	(-5,445)
G. Annualization of Civilian Health Benefits	(-1,976)
H. Other Pricing Adjustments	(99,755)
9. Functional Program Transfers	-52,435
A. Transfers - In	(75,564)
1) Inter-appropriation	41,154
2) Intra-appropriation	34,410
B. Transfers - Out	(-127,999)
1) Inter-appropriation	-81,877
2) Intra-appropriation	-46,122

10. Program Increases		629,084
A. Annualization of FY 1986 Increase	(18,112)	
B. Other Program Growth in FY 1987	(610,972)	
11. Program Decreases		-623,983
A. Annualization of FY 1986 Decrease	(-11,433)	
B. One-Time FY 1986 Costs	(-30,468)	
C. Other Program Decreases in FY 1987	(-582,082)	
12. FY 1987 President's Budget Request		6,081,297



Department of the Navy  
Operation & Maintenance, Navy  
Exhibit OP-5

Activity Group: Aircraft Rework and Maintenance  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Air Systems Command

I. Description of Operations Financed

A. Airframe Rework - This program provides for the inspection, repair, reconfiguration and conversion of fleet aircraft. It primarily addresses maintenance on the aircraft major structure and airframe systems. The objective of the program is to maintain a safe, flyable platform over the life of the weapon system by periodic return to the depot for required maintenance. The Aircraft Service Period Adjustment (ASPA) Program adjusts individual aircraft period end dates for selected aircraft when material condition warrants. Under ASPA guidelines, only aircraft that upon inspection cannot safely be extended for another 12-month tour are inducted in the depot for SDLM. Depot maintenance is conducted under the Standard Depot Level Maintenance (SDLM) program in which maintenance is performed only to the level that is technically justified and cost effective. Operational Service Period (OSP) initiatives related to increasing OSPs on selected aircraft are reflected in this submission, as are Maintenance Requirements Review Board man-hour reductions. This submission also reflects the assignment of airframe reworks to the least-cost source of repair. FY 1985 airframe requirements reflect the transition of concurrent structural component and avionics component rework from the component program to airframes.

B. Engine Rework - The engine rework program accomplishes the repair, modification and overhaul of aircraft engines, gearboxes, and torque meters. The program objective is to return depot-repairable engines to ready-for-issue status to support fleet engine pool requirements. Under the Engine Analytical Maintenance Program (EAMP), engines are repaired at the lowest echelon of maintenance. Only engines that are beyond the repair capability of intermediate maintenance activities are scheduled for induction in the depots. Depot-level maintenance may also be performed concurrent with aircraft SDLM if such maintenance is operationally necessary and cost effective. Engine SDLM reworks are directly related to aircraft rework, and a variance in the planned aircraft rework schedule will be accompanied by a commensurate change in the engine rework schedule. Engine field team assistance is included in this budget submission to provide on-site depot level maintenance on an as-needed basis.

C. Component Rework - The purpose of the component rework program is to accomplish depot level repair of aeronautical components that are beyond the repair capability of intermediate-level maintenance activities. The major portion of the FY 1985 component repair program, "2R," is the repair of unserviceable items which are included in the inventory management of the Navy Supply System. The FY 1985 program reflects the midyear transfer of aviation depot level repairables to the Navy Stock Fund. Also included in this program is repair of aeronautical components for aircraft systems and equipment which have not yet reached their Navy material support date (Repair of Repairables - ROR). The FY 1986 and 1987 programs reflect ROR requirements only.

Activity Group: Aircraft Rework and Maintenance (cont'd)

I. Description of Operations Financed (cont'd)

D. Modification Installation - This program provides the installation of modifications to improve safety, reliability, maintainability and/or readiness of in-service aircraft, and special modifications that extend their useful service life beyond that which was originally engineered. These modifications are of special significance in that they reduce the need to procure new aircraft systems by providing an updated, serviceable weapon system to meet operational commitments. Requirements for the aircraft modification program are generated by the Operational Safety Improvement Program (OSIP). The Aircraft Procurement, Navy (APN) appropriation procures the modification kits identified by the OSIP, which are then installed to produce the necessary improvements in the aircraft system. The O&M,N modification program funds the cost of labor and material needed for the installation of these kits. The objective is a coordinated and balanced program between kit procurement and kit installation. Modifications are installed concurrent with SDLM, on a "drive-in" basis, and by field modification teams for aircraft not scheduled for rework. This ensures similar configuration of aircraft within a given unit, and updates flight and maintenance systems of trainer aircraft to a configuration compatible with the fleet. Modification requirements include the cost of requisitioning aviation depot level repairable (AVDLR) components from the Navy Stock Fund for commercially supported SDLM modification aircraft during FY 1986 and FY 1987.

E. Aircraft Support Services - This program provides unscheduled services to the fleet. The services are budgeted on the basis of historical levels of effort and projected emergent requirements. This program enhances fleet readiness by providing expeditious solutions for the correction of unplanned maintenance problems incurred during fleet operations. Services include salvage of material, fleet maintenance training, customer service, small/uneconomical lot manufacturing, preservation and depreservation, aircraft salvage and recovery, and support of depot maintenance operations.

Activity Group: Aircraft Rework and Maintenance (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appro- priation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Airframe Rework	\$469,750	\$464,638	473,839	\$484,949	\$513,722	\$28,773
Engine Rework	332,456	328,396	328,380	325,566	331,866	6,300
Component Repair	638,476	70,503	70,359	107,164	58,167	-48,997
Mod. Installation	287,677	351,831	342,061	376,086	300,151	-75,935
Support Services	<u>56,899</u>	<u>32,111</u>	<u>31,500</u>	<u>32,200</u>	<u>26,639</u>	<u>-5,561</u>
Total, Aircraft Rework and Maint.	\$1,785,258	\$1,247,479	\$1,246,139	\$1,325,965	\$1,230,545	\$-95,420

Activity Group: Aircraft Rework and Maintenance (cont'd)

<u>B. Reconciliation of Increases and Decreases</u>		<u>Amount</u>
1. FY 1986 Current Estimate		\$1,325,965
2. Pricing Adjustment		21,196
A. Stock Fund	(-283)	
1) Non-Fuel	-283	
B. Industrial Fund Rates	(-24,767)	
C. Other Pricing	(46,246)	
1) Other Pricing Rates.	18,131	
2) Annualization of civilian health benefits costs.	-936	
3) Foreign Currency Rates	29,051	
3. Functional Program Increases		-21,000
A. Transfers Out	(-21,100)	
1) Inter-Appropriation transfer of O&M,N funds to APN for the Blade/Vane Rework facility at Cherry Point, NC.	-21,000	
4. Program Increases		25,715
A. Other Increases	(25,715)	
1) Increase in Airframe Rework for SDLM/Modification, SDLM/Conversion, Age Exploration Program.	10,141	
2) Increase in Engine Rework for Overhaul and Repair Reworks increased by 134 units.	15,574	
5. Program Decreases		-121,331
A. Other Decreases	(-121,331)	
1) Decrease in scheduled modification kit installations.	-81,216	
2) Decrease in component repair	-32,897	
3) Support services requirement decrease for preservation, acceptance/transfer of aircraft and special MD source coded manufacturing.	-7,075	
4) Realignment to Naval Security and Investigative Command of the responsibility to adjudicate personnel security clearances	-143	
6. FY 1987 President's Budget Request		\$1,230,545

Activity Group: Aircraft Rework and Maintenance (cont'd)

III.	<u>Performance Criteria.</u>		<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A.	<u>Airframe Rework</u>				
	Stand. Depot Level Maintenance	Units Cost	622 \$262,259	504 \$248,819	475 \$241,979
	SDLM/Modifications	Units Cost	136 \$113,503	171 \$142,857	202 \$171,748
	SDLM/Conversion	Units Cost	5 \$ 3,863	7 \$ 5,051	12 \$ 4,315
	SDLM/Crash Damage	Units Cost	14 \$ 17,478	10 \$ 9,942	15 \$ 20,086
	Age Exploration Program, Depot	Units Cost	9 \$ 3,133	12 \$ 6,857	25 \$ 9,004
	SUBTOTAL SDLM	Units Cost	786 \$400,236	704 \$413,526	729 \$447,132
	Mid-Term Inspection	Units Cost	70 \$ 8,606	67 \$ 8,489	64 \$ 7,428
	SDLM/Repair	Units Cost	144 \$ 5,554	239 \$ 5,213	364 \$ 5,120
	Air Worthiness	Units Cost	71 \$ 1,840	85 \$ 1,872	75 \$ 1,716
	Emergency Repairs	Cost	\$ 48,553	\$ 47,394	\$ 43,314
	Aircraft Service Period Adjustment Inspections	Cost	\$ 4,870	\$ 8,455	\$ 8,582
	Field Inspection	Units Cost	2 \$ 91	0 \$ 0	8 \$ 430
	SUBTOTAL Other	Units Cost	287 \$ 69,514	391 \$ 71,423	511 \$ 66,590
	Total Airframe Rework	Cost	\$469,750	\$484,949	\$513,722

Activity Group: Aircraft Rework and Maintenance (cont'd)

III. <u>Performance Criteria. (cont'd)</u>		<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
<u>B. Engine Reworks</u>				
Engine Overhaul	Units	154	153	147
	Cost	\$ 15,346	\$ 17,710	\$ 16,497
Engine Repair	Units	2,226	1,992	2,132
	Cost	<u>\$309,779</u>	<u>\$292,155</u>	<u>\$304,151</u>
Subtotal O/H & Repair	Units	2,380	2,145	2,279
	Cost	\$325,125	\$309,865	\$320,648
Gear Boxes/T.M. (O/H)	Units	285	313	301
	Cost	\$ 5,501	\$ 5,478	\$ 5,544
Gear Boxes/T.M. (Repair)	Units	87	52	47
	Cost	\$ 1,181	\$ 906	\$ 749
Special Repair	Units	1	-0-	-0-
	Cost	\$ 3	\$7,317	\$3,074
Field Team	Cost	<u>\$ 646</u>	<u>\$ 2,000</u>	<u>\$ 1,851</u>
SUBTOTAL Gear Boxes Field Team & Special	Units	373	365	348
	Cost	<u>\$ 7,331</u>	<u>\$ 15,701</u>	<u>\$ 11,218</u>
TOTAL Engine Rework	Cost	\$332,456	\$325,566	\$331,866
<u>C. Component Repair</u>				
Cog 2R (Av. Repairables -- ASO)		\$554,384	-0-	-0-
Augmented Support (ROR)		84,092	107,164	58,167
SDLM Support		-0-	-0-	-0-
Total Component Repair		<u>\$638,476</u>	<u>\$107,164</u>	<u>\$58,167</u>
<u>D. Modification Installation</u>				
Concurrent with Aircraft Rework		\$ 48,662	\$ 86,061	\$92,269
Drive-In Mod		5,578	3,476	4,031
Field Mod Team		26,673	33,365	12,217
Trainer		1,803	1,766	624
Comm'l Mod Install Cost		204,263	251,386	190,801
Verification Installation		<u>698</u>	<u>32</u>	<u>209</u>
Total Modification Installation		\$287,677	\$376,086	\$300,151

Activity Group: Aircraft Rework and Maintenance (cont'd)

III. <u>Performance Criteria (cont'd)</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
E. <u>Support Services</u>			
Preservation	\$12,674	\$ 8,084	\$ 4,718
Salvage	840	703	459
Acceptance/Transfer	2,800	2,545	1,497
Customer/Fleet Training	3,360	2,838	2,008
Customer Services	11,542	7,825	9,400
Other Support Items	10,696	7,492	6,791
Material Support (Govt. Control)	9,944	-0-	-0-
Aircraft Recovery	1,856	623	800
Special MD Manufacturing	<u>3,187</u>	<u>2,090</u>	<u>966</u>
Total Support Services	\$56,899	\$32,200	\$26,639

IV. Personnel Summary

Not applicable

Department of the Navy  
Operation & Maintenance, Navy  
Exhibit OP-5

Activity Group: Air-Launched Weapons Rework  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Air Systems Command

I. Description of Operations Financed.

Missile maintenance requirements financed by this program include missile testing, repair, rework, Navy approved modifications and on-site technical assistance to maintenance facilities. Quantities of missiles requiring a test are computed based on the length of time that a missile can remain ready for issue in the fleet. When the test is due, or a missile fails in the fleet, the missile is returned to a Naval Weapons Station where it is tested, disassembled and repaired, and reassembled. Major missile sections requiring repair beyond the capability of the naval weapons stations are forwarded to a designated overhaul point for rework. This program provides for all action required to maintain the asset readiness posture prescribed by the Chief of Naval Operations. In addition, this program provides for missile engineering expense directly associated with the repair of the weapon.

The air-launched ordnance and ammunition maintenance requirements financed by this program provide for the renovation of air-launched ordnance, ammunition and explosive devices and on-site technical assistance to maintenance facilities. Maintenance is performed on Navy-owned ordnance/ammunition items outside the purview of the Army Single Manager, including material in Navy retail outlets, depot repairable Navy material located in Army inland depots and items excluded from the Single Manager charter such as aircraft installed Cartridge Actuated Devices (CADs) and Aircrew Escape Propulsion Systems (AEPS). The FY 1985 budget displays an increase for a half of a year for 4Z Cog components relative to ordnance maintenance which will remain Appropriation Purchases Account material. This program provides for all action required to maintain the asset readiness posture prescribed by the Chief of Naval Operations. In addition, this program provides for ordnance engineering expense directly associated with the repair of the weapon.

The special weapons maintenance and support program provides for maintenance and on-site technical assistance to maintenance facilities for weapons training devices.



Activity Group: Air-Launched Weapons Rework (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

		FY 1986			FY 1987	
	<u>FY 1985</u>	<u>Budget Request</u>	<u>Appro- priation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	<u>Change</u>
Air-Launched Missile Rework	\$67,196	\$63,826	62,044	\$67,262	\$66,547	\$ -715
Air-Launched Ordnance and Ammunition Rework	29,102	32,554	32,569	48,445	34,059	-14,386
Special Weapons Maintenance and Support	<u>6,248</u>	<u>7,115</u>	<u>7,147</u>	<u>7,089</u>	<u>6,386</u>	<u>-703</u>
Total, Air-Launched Weapons Rework	\$102,546	\$103,495	\$101,760	\$122,796	\$106,992	\$-15,804

Activity Group: Air-Launched Weapons Rework (cont'd)

B. <u>Reconciliation of Increases and Decreases</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$122,796
2. Pricing Adjustments	2,289
A. Stock Fund (-51)	
1) Non-Fuel -51	
B. Industrial Fund Rates (1,149)	
C. Other Pricing (1,191)	
3. Program Increases 404	
A. Other Program Growth in FY 1987 (404)	
1) Expendable Ordnance (2E Cog) maintenance expense increased in response to the greater quantity of higher cost, MK 80 series bomb bodies requiring thermal patch repair. 404	
4. Program Decreases -18,497	
A. Other Program Decreases in FY 1987 (-18,497)	
1) Reduced number of depot repair actions performed on bomb racks and fuel tanks (4Z COG). -7,677	
2) Reduced funding associated with implementation of approved Engineering Change Proposals for bomb fin assemblies. -3,043	
3) Organic and commercial modification expense reduction associated with aircraft bomb rack Engineering Change Proposals. -1,452	
4) Reduction in funds associated with scheduled implementation of approved Engineering Change Proposal for the modification upgrade of the Multiple Ejection and Triple Ejection bomb racks. -664	
5) Reduction of Bomb Dummy Unit (BDU) maintenance actions performed at organic ordnance facilities by 786 units. -852	
6) FY 1986 completion of the phase out program for the Standard Arm weapon system. -445	
7) Decrease commercial modification expense for the incorporation of approved Engineering Change Proposal on the sustainer section of HARPOON weapons system assets. -250	

Activity Group: Air-Launched Weapons Rework (cont'd)

C.	<u>Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
	8) Decrease in maintenance production support for the development of workload requirement forecasting for Air-Launched Weapons.	-4,114
5.	FY 1987 President's Budget Request	\$106,992

Activity Group: Air-Launched Weapons Rework (continued)

III. Performance Criteria

A.	<u>Air-Launched Missile Rework</u>		<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	<u>Maintenance</u>				
	Sidewinder	Units	1,171	1,497	1,661
		Cost	\$ 7,017	\$ 7,749	\$ 7,240
	Sparrow	Units	1,659	1,679	2,062
		Cost	\$ 10,910	\$ 8,738	\$11,267
	Walleye	Units	1,126	927	1,147
		Cost	\$ 3,634	\$ 3,775	\$ 4,872
	Shrike	Units	1,855	1,607	1,519
		Cost	\$ 1,922	\$ 1,894	\$ 1,827
	Standard Arm	Units	-	-	-
		Cost	\$ 444	\$ 248	\$ -
	Phoenix	Units	1,524	1,403	1,334
		Cost	\$ 6,789	\$ 6,489	\$ 5,237
	Harpoon	Units	490	518	451
		Cost	\$ 15,660	\$ 12,722	\$11,654
	Harm	Units	39	174	126
		Cost	\$ 670	\$ 1,309	\$ 1,234
	Skipper	Units	-	-	133
		Cost	\$ -	\$ -	\$ 442
	Subtotals	Units	7,864	7,805	8,433
		Cost	\$ 47,046	\$ 42,924	\$43,773
	<u>Modifications</u>				
	Sidewinder	TD/Mods	3/2,270	4/2,374	3/1,397
		Cost	\$ 490	\$ 289	\$ 376
	Sparrow	TD/Mods	1/ 147	-/-	3/1,290
		Cost	\$ 304	-	\$ 123

Activity Group: Air-Launched Weapons Rework (continued)

III. Performance Criteria (cont'd)

		<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Shrike	TD/Mods	2/1,067	2/1,400	4/2,728
	Cost	\$ 145	\$ 464	\$ 1,150
Phoenix	TD/Mods	4/66	3/1,276	3/662
	Cost	\$ 50	\$ 219	\$ 138
Harm	TD/Mods	-/-	-/-	1/126
	Cost	\$ -	\$ -	\$ 37
Harpoon	TD/Mods	22/1,124	5/1,426	15/2,916
	Cost	\$ 5,940	\$ 9,819	\$ 9,126
Walleye	TD/Mods	1/145	-/-	3/1,086
	Cost	\$ 10	\$ -	\$ 57
Subtotal	TD/Mods	33/4,819	14/6,476	32/10,205
	Cost	\$ 6,939	\$ 10,791	\$ 11,007

Engineering Services

Harm	Manyrs	5.2	11.1	9.1
	Cost	\$ 457	\$ 905	\$ 802
Harpoon	Manyrs	22.5	27.0	23.6
	Cost	\$ 2,115	\$ 2,198	\$ 1,943
Hellfire	Manyrs	0.7	0.7	0.6
	Cost	\$ 92	\$ 83	\$ 79
Maverick	Manyrs	0.1	0.3	0.3
	Cost	\$ 18	\$ 33	\$ 33
Phoenix	Manyrs	24.6	27.5	24.8
	Cost	\$ 2,104	\$ 2,224	\$ 2,019
Shrike	Manyrs	10.7	13.4	11.5
	Cost	\$ 963	\$ 1,106	\$ 954
Sidewinder	Manyrs	26.8	29.6	26.4
	Cost	\$ 2,298	\$ 2,358	\$ 2,124
Skipper	Manyrs	0.2	0.2	0.2
	Cost	\$ 18	\$ 21	\$ 21
Sparrow	Manyrs	31.7	36.1	32.5
	Cost	\$ 2,866	\$ 2,884	\$ 2,624
Standard Arm	Manyrs	9.5	2.0	-
	Coost	\$ 889	\$ 197	\$ -

Activity Group: Air-Launched Weapons Rework (continued)

III. Performance Criteria (cont'd)

		<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Tow	Manyrs Cost	2.5 \$ 179	4.7 \$ 372	2.8 \$ 216
Walleye	Manyrs Cost	13.7 \$ 1,212	14.9 \$ 1,166	11.6 \$ 952
Subtotal	Manyrs Cost	148.2 \$ 13,211	167.5 \$ 13,547	143.4 \$ 11,767
TOTAL COST		\$ 67,196	\$ 67,262	\$ 66,547

Activity Group: Air-Launched Weapons Rework (continued)

III. Performance Criteria (cont'd)

		<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
B.	<u>Air-Launched Ordnance and Ammunition Rework</u>			
	<u>Maintenance</u>			
Aircrew Escape Propulsion System	Units Cost	715 \$ 503	822 \$ 997	733 \$ 1,204
Cartridge Actuated Devices	Units Cost	9,535 \$ 645	9,655 \$ 721	10,228 \$ 764
Bombs	Units Cost	10,560 \$ 2,066	27,167 \$ 3,581	33,412 \$ 3,974
Rockets/ Launchers	Units Cost	20,307 \$ 911	5,428 \$ 431	6,264 \$ 471
Pyrotechnics	Units Cost	6,401 \$ 146	21,427 \$ 531	22,647 \$ 519
Chaff/ Dispensers	Units Cost	93,008 \$ 49	- \$ -	- \$ -
Aircraft Gun Ammunition	Units Cost	249,361 \$ 94	402,436 \$ 160	382,143 \$ 148
Aircraft Gun Systems	Units Cost	617 \$ 2,615	805 \$ 3,041	957 \$ 2,384
Bomb Racks	Units Cost	\$ 1,842 6,530	4,750 \$ 14,417	3,036 \$ 9,158
Buddy Stores	Units Cost	60 \$ 2,487	81 \$ 3,016	60 \$ 2,294
Fuel Stores	Units Cost	1,108 \$ 4,654	1,235 \$ 5,480	783 \$ 3,159
Missile Launchers	Units Cost	903 \$ 3,526	1,352 \$ 4,845	1,262 \$ 4,841
Subtotal	Cost	\$ 24,226	\$ 37,220	\$ 28,916

Activity Group: Air-Launched Weapons Rework (continued)

III. Performance Criteria (cont'd)

		<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
<u>Modifications</u>				
Bomb Racks	TD/Mods	1/1,050	11/8,463	-/-
	Cost	\$ 60	\$ 2,163	\$ -/-
Gun Systems	TD/Mods	1/136	-/-	-/-
	Cost	\$ 146	-	-
Bombs	TD/Mods	1/232	3/40,600	-/-
	Cost	\$ 59	\$ 2,780	\$ -
Rockets/Launchers	TD/Mods	1/1,200	4/ 2,850	-/-
	Cost	\$ 152	\$ 111	\$ -
Subtotal		\$ 417	\$ 5,054	\$ -



Activity Group: Air-Launched Weapons Rework (continued)

III. Performance Criteria (cont'd)

		<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
<u>Engineering Services</u>				
Aircrew Escape	Manyrs	4.6	4.9	4.4
Propulsion	Cost	\$ 338	\$ 358	\$ 333
Systems				
Cartridge	Manyrs	7.1	7.9	7.1
Actuated	Cost	\$ 538	\$ 576	\$ 540
Devices				
Bombs	Manyrs	8.7	13.9	9.5
	Cost	\$ 741	\$ 1,112	\$ 815
Rockets/	Manyrs	5.1	6.2	5.3
Launchers	Cost	\$ 400	\$ 472	\$ 420
Aircraft Gun	Manyrs	2.4	3.2	2.5
Ammunition	Cost	\$ 220	\$ 283	\$ 231
Chaff/	Manyrs	0.6	0.6	0.5
Dispensers	Cost	\$ 45	\$ 46	\$ 40
Pyrotechnics	Manyrs	4.7	5.1	4.6
	Cost	\$ 360	\$ 398	\$ 374
Aircraft Gun	Manyrs	4.2	13.1	9.7
Systems	Cost	\$ 347	\$ 1,129	\$ 806
Airborne Wea-	Manyrs	2.0	2.2	2.2
pon Control	Cost	\$ 163	\$ 169	\$ 185
and Release				
Equipment				
Bomb Racks	Manyrs	7.5	8.8	7.5
	Cost	\$ 592	\$ 648	\$ 629
Buddy Stores	Manyrs	-	1.5	0.2
	Cost	\$ -	\$ 92	\$ 14
Fuel Tanks	Manyrs	-	1.4	0.2
	Cost	\$ -	\$ 92	\$ 14
Submarine	Manyrs	1.7	1.5	1.5
Warfare Air-	Cost	\$ 140	\$ 115	\$ 127
borne Devices				
Missile	Manyrs	7.0	8.2	7.1
Launchers	Cost	\$ 575	\$ 681	\$ 615
Subtotal	Manyrs	55.6	78.5	62.3
	Cost	\$ 4,459	\$ 6,171	\$ 5,143
TOTAL COST		\$ 29,102	\$ 48,445	\$34,059

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Activity Group: Air-Launched Weapons Rework (continued)

III. Performance Criteria (cont'd)

		<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
C.	<u>Special Weapons</u>			
	<u>Maintenance and</u>			
	<u>Support</u>			
	<u>Maintenance</u>			
	War Reserve/Trainer			
	Actions	7,887	9,116	9,437
	Cost	\$ 3,202	\$ 3,917	\$ 3,262
	Subtotal			
	Actions	7,887	9,116	9,437
	Cost	\$ 3,202	\$ 3,917	\$ 3,262
	<u>Engineering Services</u>			
	Maintenance			
	Engineering			
	(AWCAP)			
	Manyrs	15.2	15.6	14.2
	Cost	\$ 1,200	\$ 1,232	\$ 1,116
	Publications			
	Manyrs	4.1	6.4	6.4
	Cost	\$ 244	\$ 341	\$ 361
	Quality			
	Evaluation			
	Manyrs	14.6	16.3	15.9
	Cost	\$ 1,602	\$ 1,599	\$ 1,647
	Subtotal			
	Manyrs	33.9	38.3	36.5
	Cost	\$ 3,046	\$ 3,172	\$ 3,124
	TOTAL COST	\$ 6,248	\$ 7,089	\$ 6,386
	GRAND TOTAL			
	Cost	\$ 102,546	\$ 122,796	\$ 106,992

Activity Group: Air-Launched Weapons Rework (cont'd)

IV. Personnel Summary.

Not Applicable

Department of the Navy  
Operation and Maintenance, Navy  
Exhibit OP-5

Activity Group: Other Aviation Systems Maintenance  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Air Systems Command

1. Description of Operations Financed.

Funding in Other Aviation Systems Maintenance provides for the following:

A. Calibration program funds are used for labor and materials at depot calibration facilities, including NAVAIR calibration laboratories and annexes, Navy standards laboratories, The Metrology Engineering Center, and other Navy, Army and Air Force calibration activities. The NAVAIR depot calibration laboratories, DOD inter/intraservice and commercial laboratories, calibrate support equipment and standards which are beyond the capability of fleet intermediate level facilities. The NAVAIR standards laboratories calibrate standards from the lower echelon laboratories. The National Bureau of Standards (NBS) provides calibration services for the most accurate standards in each measurement group for the NAVAIR standards laboratories. In addition to funding depot level calibrations, this program provides funds necessary for technical support. These funds provide host/tenant agreements, technical support of depot laboratories outside the continental U.S. and permanent change of station movement of calibration technicians.

B. The Overhaul of Ground Support Equipment (GSE) Program provides funding for depot level rework of support equipment (SE) under the cognizance of the Naval Air Systems Command, inventory control points and type commanders. The depot level rework process involves inducting SE units into a depot level maintenance facility for inspection, disassembly, repair and verification of repair in accordance with established SE rework specifications. SE rework includes end item repair, check, test, component replacement, painting and corrosion control when incidental to rework, and incorporation of all engineering changes. The Service Life Extension Program for SE is also accomplished using SE rework funds. In addition, the program finances the Aviators Breathing Oxygen repair program, rework specification production, and quick engine change pool management.

C. The Meteorological Support Program leases facsimile equipment for dissemination of weather products to approximately sixty stations; and the installation, maintenance and support of meteorological equipment and Shipboard Readout Equipment.

D. Target Maintenance provides depot level maintenance for targets and support for equipment and training pods essential for fleet training.

E. The Airborne Mine Countermeasures Program provides ready-for-issue mine countermeasures equipment in sufficient quantities to support peacetime operating and training requirements and a sufficient inventory of equipment to support a wartime requirement until a production flow of material can be established. The program finances the overhaul of equipment as well as the calibration of hydrodynamic components in their operating environment prior to fleet issue.

Activity Group: Other Aviation Systems Maintenance (cont'd)

I. Description of Operations Financed (cont'd)

F. Overhaul of Aircraft Cameras supports the overhaul and repair of aerial cameras. This program provides film processing and printing, and analysis for photographic mobile van complexes in support of Fleet operational training flights. In addition the program also provides technical, material and operational readiness in support of Tactical Aerial Reconnaissance Pod Systems.

G. The Coast Guard program provides for maintenance and support of Navy-owned electronic equipment in Coast Guard aircraft.

H. Aviation Tactical Software provides for the maintenance of systems software, and software changes necessary to ensure maximum operational capability of all Naval aircraft/weapon systems which employ digital computers.

II. Financial Summary. (Dollars in Thousands)

A. Sub-Activity Breakout.

		FY 1986			FY 1987	
	FY 1985	Budget Request	Appro- priation	Current Estimate	Budget Request	Change
Calibration	\$64,552	\$71,310	\$70,832	\$73,899	\$60,657	-\$13,242
Overhaul of SE	98,505	108,281	108,229	115,709	88,993	-26,716
Meteorological Support	3,390	3,219	3,216	3,416	3,893	477
Target Maintenance	6,583	13,534	13,526	13,511	5,900	-6,611
Airborne Mine Countermeasures	11,146	10,595	10,586	12,665	9,409	-3,256
Overhaul of A/C Cameras	4,340	3,401	3,398	3,398	3,374	-24
Coast Guard	2,132	2,332	2,331	2,331	2,406	-75
Aviation Tactical Software	<u>47,931</u>	<u>56,926</u>	<u>56,923</u>	<u>69,223</u>	<u>44,288</u>	<u>-24,935</u>
Total, Other Aviation Systems Maintenance	\$238,579	\$269,598	\$269,041	\$294,152	\$218,920	-\$75,232

Activity Group: Other Aviation Systems Maintenance (cont'd)

<u>B. Reconciliation of Increases and Decreases</u>		<u>Amount</u>
1. FY 1986 Current Estimate		\$294,152
2. Pricing Adjustments		2,391
A. Stock Fund	(-11)	
1) Non-Fuel	-11	
B. Industrial Fund Rates	(-2,068)	
C. Foreign Currency	(3,583)	
D. Other Pricing Adjustments	(887)	
3. Program Increases		548
A. Other Program Growth in FY 1987	(548)	
1) Increase due to the installation of more complex weather systems.	470	
2) Increased maintenance support for Coast Guard.	78	
4. Program Decreases		-78,171
A. One-time FY 1986 Costs	(-2,275)	
1) FY 86 one-time repair of AQM-37A Target containers, tow reel conversions, and BQM-34 target repair.	-2,275	
B. Other Program Decreases in FY 1987	(-75,896)	
1) Decrease in number of calibrations performed at Type III labs.	-14,270	
2) Decrease in number of support equipment items reworked.	-26,006	
3) Decrease due to reductions in level of aerial and surface target repair/conversion efforts.	-4,920	
4) Decrease in maintenance support for aircraft cameras due to reduction in requirements.	-49	
5) Decrease in overhaul of airborne mines countermeasures minesweeping equipment.	-2,816	
6) Decrease in new configuration items (CIs) for EA-6B, EWSSA, and P-3C in addition to reduced software support for the F-14, A-6, EA-6B, P-3C, F/A-18, HARM and AV-8B.	-15,797	
7) Reduction in number of calibrations performed in Type III Labs.	-51	
8) Reduction in overhauls for SMQ-6 satellite systems and FPS-106 weather radar.	-193	
9) Reduction in aerial target repair.	-655	

Activity Group: Other Aviation Systems Maintenance (cont'd)

- 10) Reduction in overhaul of Airborne mines countermeasures minesweeping equipment. -578
- 11) Reduction in maintenance support for aircraft cameras. -34
- 12) Decrease in software support for the F-14, A-6, EA-6B, P-3C, F/A-18, HARM and AV-8B. -10,527

5. FY 1987 President's Budget Request

\$218,920

III. Performance Criteria.

FY 1985

FY 1986

FY 1987

Calibration

Type I Lab	Units	12,106	6,890	7,732
	Cost	\$4,322	\$2,267	\$2,761
Type II Lab	Units	16,838	11,298	14,298
	Cost	\$4,580	\$2,915	\$3,549
Type III Lab	Units	144,047	146,187	93,212
NIF	Cost	\$33,707	\$33,802	\$26,104
Non-NIF	Units	65,382	92,501	79,802
	Cost	\$11,638	\$18,960	\$19,372
Commercial	Units	19,407	30,956	15,801
	Cost	\$10,305	\$15,955	\$8,871
TOTAL	Units	257,780	287,832	210,845
	Cost	\$64,552	\$73,899	\$60,657

Overhaul of SE

Mobile Electric Power Plant (MEPP's) and Air Conditioners	Units	425	445	376
	Cost	\$20,188	\$20,014	\$15,098
Tractors and Fire trucks	Units	290	354	289
	Cost	\$8,952	\$10,900	\$8,354
Hydraulic, Pneumatic, and Oxygen/Nitrogen Servicing	Units	550	657	495
	Cost	\$9,845	\$12,219	\$8,087
Armament Handling Equipment	Units	10,529	10,922	9,402
	Cost	\$11,096	\$11,830	\$10,869
Automatic Test Equipment and On-Site Rework	Units	275	313	257
	Cost	\$34,142	\$42,093	\$32,290

Activity Group: Other Aviation Systems Maintenance (cont'd)

III. Performance Criteria

Peculiar Support Equip-	Units	3,928	5,402	4,342
ment Miscellaneous	Cost	\$14,282	\$18,653	\$14,295
Avionics				
TOTAL	Units	15,997	18,093	15,161
	Cost	\$98,505	\$115,709	\$88,993

Meteorological Support

Major Overhaul of				
Systems/Subsystems (Units)	12	12	12	

Minor Overhaul of			
Systems/Subsystems (Units)	40	42	40

Target Maintenance

Depot Repair (Units)			
Aerial Targets	81	406	43
Surface Targets	3	34	13

Conversions (Units)			
Aerial Targets	30	55	38
Surface Targets	15	17	5

Airborne Mine Countermeasures

<u>Repair</u>			
Mechanical	Units	5	7
	Cost	\$782	\$684
			12
			\$439

Acoustical	Units	12	18
	Cost	\$2,652	\$1,950
			43
			\$1,574

<u>Overhaul</u>			
Mechanical	Units	20	15
	Cost	\$5,924	\$6,994
			16
			\$5,286

Acoustical	Units	4	5
	Cost	\$1,150	\$2,002
			3
			\$1,018

<u>Calibration</u>			
Mechanical	Units	200	172
	Cost	\$510	\$890
			130
			\$798

Acoustical	Units	50	28
	Cost	\$128	\$145
			47
			\$294



Activity Group: Other Aviation Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)      FY 1985      FY 1986      FY 1987

Overhaul of Aircraft Cameras

Major Systems Rework (Units)	1,233	1,008	984
Other Maintenance Actions (Units)	720	740	740

Coast Guard (Units Maintained)

Radar	670	699	698
Communication	427	445	444
Navigation	163	170	169
Peculiar Support Equipment Calibration & Repair	282	294	295
Consumable Parts	487	510	508

Aviation Tactical Software

Weapons System	FY 1984		FY 1985		FY 1986		FY 1987	
	Config. Items	No. of SCP's	Config. Items	No. of SCP's	Config. Items	No. of SCP's	Config. Items	No. of SCP's
TACAMO	1	5	1	5	1	8	1	6
S-3A	2	54	3	63	3	66	3	72
A-7	2	40	2	50	2	42	2	46
F-4	1	1	1	2	1	3	1	2
SH-2,3 TACNAV	1	4	2	6	2	10	2	10
A-4M	1	12	1	12	1	13	1	14
F-14	2	64	2	70	2	96	2	54
CAINS	5	5	5	5	7	8	7	7
A-6	2	50	2	44	2	54	2	20
AWG-21	1	3	1	3	1	3	1	4
EA-6B	2	18	3	16	3	69	2	26
P-3C	4	44	3	48	4	76	3	33
P-3B	2	4	3	7	3	12	3	9
AN/AYK-14	2	6	2	6	2	6	2	6
MTASS	2	7	2	12	2	18	2	18
AEDAS/GSS	2	6	2	7	2	7	2	7
F-18	6	60	3	78	3	117	3	71
EWSSA	2	10	4	16	6	18	5	25
HARM	-	-	2	6	2	14	2	7
AV-8B	-	-	1	9	2	72	2	32
HIS-2	-	-	-	-	1	6	0	0

(SCP's - Software Change Proposals)  
(Config. - Configuration Items)

Activity Group: Other Aviation Systems Maintenance (cont'd)

IV. Personnel Summary.

Not applicable

Department of the Navy  
Operation & Maintenance, Navy  
Exhibit OP-5

Activity Group: Maintenance Support  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Air Systems Command

1. Description of Operations Financed.

This activity group provides maintenance support services for aviation systems and equipment utilized in aircraft, calibration and support equipment, targets, airborne mine countermeasures, and air launched missiles and ordnance. Services include technical investigations, reviews and evaluation of maintenance requirements and integrated logistic support plans. The Air-Launched Missile Maintenance Support line specifically finances on-site technical assistance and support to the fleet operating units, quality evaluation of in-service weapons, review and evaluation of maintenance requirements, review and development of integrated logistic support plans, contractor interim support for air-launched missiles transferred from the Weapons Procurement, Navy Appropriation in FY 1986.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout.

		FY 1986			FY 1987	
	FY 1985	Budget Request	Appro- priation	Current Estimate	Budget Request	Change
Aircraft Maintenance Support	\$5,635	\$2,581	\$2,578	\$5,647	\$5,232	\$-415
Air-Launched Missile Maintenance Support	15,355	22,422	22,415	21,349	19,678	-1,671
Calibration Maintenance Support	3,622	3,771	3,771	2,875	3,863	988
Support Equipment Maint. Support	986	1,051	1,051	300	1,077	777
Target Maintenance Support	170	366	366	206	375	169
Airborne Mine Countermeasures Maintenance Support	365	305	305	305	311	6
Total, Maint. Supt.	\$26,133	\$30,496	\$30,486	\$30,682	\$30,536	\$-146

70032

Activity Group: Maintenance Support (cont'd)

B. <u>Reconciliation of Increases and Decreases</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$30,682
2. Pricing Adjustments	1,160
A. Industrial Fund Rates	(398)
B. Other Pricing	(762)
3. Program Increases	1,799
A. Other Increases	(1,799)
1) Increased requirements in support of the MEASURE Software Support Activity and the implementation of improved methodologies and data analysts for the development of Calibration requirements	873
2) Increased requirements in support of Aviation Breathing Oxygen program sites and the development/update of SE rework specifications.	765
3) Increased requirements in support of the collection and assemblage of Target Maintenance data in addition to the development of a more sophisticated spares methodology.	161
4. Program Decreases	-3,105
A. Other Decreases	(-3,105)
1) Decrease in Aircraft Maintenance Support requirements.	-555
2) Decrease in funding for on-site Navy Civilian Technical Specialists required to provide consultation/assistance in areas of fleet missile/ordnance operation, in addition to a reduction in the performance of inventory assessment tests to assess the quality, reliability, and serviceability of in-service material.	-1,412
3) Decrease in Airborne Mines Countermeasures Maintenance Support requirements.	-6
4) Decrease in funding for on-site Navy Civilian Technical Specialists required to provide consultation/assistance in areas of fleet missile/ordnance operations, in addition to a reduction in the performance of inventory assessment tests to assess the quality, reliability, and serviceability of in-service material.	-1,053
5) Decrease in Aircraft Maintenance Support requirements.	-79
5. FY 1987 President's Budget Request	\$30,536

Activity Group: Maintenance Support (continued)

III. Performance Criteria

			<u>FY 1985</u>	<u>FY 1986</u>	<u>FY1987</u>
A.	<u>Air-Launched Missile Maintenance Support</u>				
Sidewinder	Manyrs		13.4	8.5	6.9
	Cost	\$	821	\$ 636	\$ 526
Sparrow	Manyrs		15.8	15.6	12.2
	Cost	\$	1,110	\$ 1,171	\$ 963
Walleye	Manyrs		4.0	4.2	3.2
	Cost	\$	314	\$ 393	\$ 329
Shrike	Manyrs		8.1	3.3	2.6
	Cost	\$	514	\$ 257	\$ 216
Standard Arm	Manyrs		0.2	-	-
	Cost	\$	19	\$ -	\$ -
Phoenix	Manyrs		4.6	6.4	4.9
	Cost	\$	347	\$ 483	\$ 388
Harpoon	Manyrs		7.0	6.6	5.4
	Cost	\$	571	\$ 462	\$ 392
Harm	Manyrs		1.6	2.8	2.3
	Cost	\$	146	\$ 254	\$ 219
Tow	Manyrs		0.8	0.9	0.7
	Cost	\$	62	\$ 81	\$ 71
Hellfire	Manyrs		-	-	-
	Cost	\$	-	\$ -	\$ -
Skipper	Manyrs		0.1	-	-
	Cost	\$	7	\$ -	\$ -
Aircrew Escape Propulsion Systems	Manyrs		4.4	3.6	2.8
	Cost	\$	290	\$ 254	\$ 209
Cartridge Actuated Devices	Manyrs		10.3	10.6	8.3
	Cost	\$	645	\$ 756	\$ 623
Rockets/ Launchers	Manyrs		3.6	2.7	2.2
	Cost	\$	278	\$ 325	\$ 274
Bombs	Manyrs		11.3	10.6	8.2
	Cost	\$	907	\$ 810	\$ 671
Pyrotechnics	Manyrs		3.1	3.0	2.4
	Cost	\$	209	\$ 212	\$ 174

70034

Activity Group: Maintenance Support (continued)

III. Performance Criteria (cont'd)

		<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Aircraft Gun	Manyrs	0.8	0.8	0.7
Ammunition	Cost	\$ 66	\$ 67	\$ 58
Airborne	Manyrs	0.1	0.1	0.1
Weapons	Cost	\$ 10	\$ 10	\$ 9
Control				
and Release				
Equipment				
Aircraft Gun	Manyrs	0.6	0.6	0.5
Systems	Cost	\$ 51	\$ 52	\$ 45
Bomb Racks	Manyrs	0.6	0.8	0.5
	Cost	\$ 46	\$ 51	\$ 43
Submarine War-	Manyrs	0.1	0.1	0.1
fare Airborne	Cost	\$ 7	\$ 7	\$ 6
Devices				
Missile	Manyrs	0.8	0.8	0.6
Launchers	Cost	\$ 52	\$ 60	\$ 50
TOTAL	Manyrs	91.3	82.0	64.6
	Cost	\$ 6,472	\$ 6,341	\$ 5,266

B. Other Technical Support

Manyrs	120.9	128.8	126.8
Cost	\$ 4,350	\$ 4,484	\$ 4,961

C. Navy Civilian Technical Services

Missiles	Manyrs	42.7	45.5	35.2
	Cost	\$ 2,504	\$ 2,752	\$ 2,106
Ordnance	Manyrs	34.5	36.5	30.2
	Cost	\$ 2,029	\$ 2,140	\$ 1,798
TOTAL	Manyrs	77.2	82.0	65.4
	Cost	\$ 4,533	\$ 4,892	\$ 3,904

D. Contractor Logistics Support

Sidewinder	Manyrs	-	0.7	0.7
	Cost	\$ -	\$ 97	\$ 102
Sparrow	Manyrs	-	4.6	3.9
	Cost	\$ -	\$ 586	\$ 541
Phoenix	Manyrs	-	5.6	4.7
	Cost	\$ -	\$ 663	\$ 584

Activity Group: Maintenance Support (continued)

III. Performance Criteria (cont'd)

		<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Harpoon	Manyrs	-	33.2	32.2
	Cost	\$ -	\$ 4,286	\$ 4,320
TOTAL	Manyrs	-	44.1	41.5
	Cost	\$ -	\$ 5,632	\$ 5,547
GRAND TOTAL	Cost	\$ 15,355	\$ 21,349	\$ 19,678

Activity Group: Maintenance Support (cont'd)

IV. Personnel Summary

Not applicable



Department of the Navy  
Operation and Maintenance, Navy  
Exhibit OP-5

Activity Group: Procurement Operations  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Air Systems Command

I. Description of Operations Financed.

This activity group finances personnel and support costs for Naval Plant Representative Offices, Project Management Offices - AIR and the Theater Nuclear Warfare Project Office.

The Inspection and Contract Administration Program finances the six Naval Plant Representative Offices (NAVPROs) located at Bethpage, Burbank, Dallas, Lynn, Stratford and St. Louis, which provide Contract Administration Services as outlined in the Federal Acquisition Regulations (FAR) Part 42, including administrative contracting officer functions in seven assigned major weapons systems manufacturing plants (Grumman Aerospace Corp., Lockheed Aircraft Corp., McDonnell Douglas Corp., Vought Corp., General Electric Co., Sikorsky Aircraft Division and Government Aircraft Factory, Australia). The 64 functions listed in the FAR are statutory requirements that must be performed under the Procurement Act of 1958 as amended (Public Law 85-804). The Naval Plant Representative Offices provide a single onsite government interface for the Department of Defense, National Aeronautics and Space Administration, and Foreign Military Sales Representatives with the assigned major weapon systems manufacturers. The NAVPROs assure that the manufacturer's quality assurance, engineering, industrial management, logistics and production, contractual processes, procedures and products conform to contractual requirements.

The Project Management Office - AIR (PMOA) program provides dedicated overall management for programs designated by the Secretary of Defense as major systems acquisition programs (SECNAVINST 5000.1A). The PMOA also has management responsibilities for naval aviation programs, subsystems and components. These include control of all resources (all support necessary for specific major systems acquisition programs); integrated planning, acquisition, initial support and readiness; also, directing implementation and appraising the performance of technical and business tasks assigned to the Naval Air Systems Command functional elements.

The Theater Nuclear Warfare Project Office (PM-23) was established to modernize the Navy's theater nuclear forces and the fleet's capabilities to operate in a nuclear environment. PM-23 will be budgeted under the Naval Sea Systems Command effective in FY 1986.

Activity Group: Procurement Operations (cont'd)

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Break-out.

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986</u> <u>Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987</u> <u>Budget Request</u>	<u>Change</u>
Inspection and Contract Administration	31,498	35,511	35,575	36,314	37,363	1,049
Project Management Office-AIR	10,349	10,049	10,308	14,210	13,804	-406
Theater Nuclear Warfare Project Office	<u>2,444</u>	<u>2,731</u>	<u>2,731</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total, Procurement Operations	44,291	48,291	48,614	50,524	51,167	643

Activity Group: Procurement Operations (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1986 Current Estimate		\$50,524
2. Pricing Adjustment		-157
A. Civilian Health Benefits Reduction	(-36)	
B. Average Grade Reduction	(-254)	
C. Other Pricing Adjustments	(+133)	
3. Program Increases		2,449
A. Other Program Growth in FY 1987	(2,449)	
1) Inspection and Contract Administration (NAVPRO):	2,449	
a) Increase to fund salaries for an additional 13 workyears associated with Contract Administration Services (CAS). This increase supports the SECNAV initiative to reduce the backlog of overage orders, control growth of contractor overhead costs, and reduce fraud, waste and abuse (403).		
b) Increase to fund salaries for an additional 66 workyears associated with the Buy Our Spares Smart (BOSS) program. BOSS is an initiative to improve spare parts acquisition through breakout, competition, intensified pricing and value engineering (2,046).		
4. Program Decreases		-1,649
A. Other Program Decreases in FY 1987	(-1,649)	
1) Inspection and Contract Administration (NAVPRO):	-1,233	
a. Efficiency Reviews saving projected to result from scheduled efficiency reviews (-637).		
b. Projected savings associated with productivity initiatives (-596).		
2) Project Management Office - AIR (PMOA):	-416	
a. Reduction in contractor support and other purchased services due to decrease support and workload requirements (-416).		
5. FY 1987 President's Budget Request		\$51,167

Activity Group: Procurement Operations (cont'd).

III. Performance Criteria.

A. Inspection and Contract Administration (NAVPRO)

(Dollars in Millions)	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Number of NAVPROs	6	6	6
Total Number of Contracts	30,955	33,362	36,364
Value of all goods and services accepted	\$7,220	\$7,235	\$7,488
Return on Investment	339	413	466
Value and number of procurement actions	\$1,646 7,279	\$1,725 8,080	\$1,809 8,719
Value and number of unpriced orders negotiated	\$1,044 3,530	\$1,142 3,506	\$1,109 3,445
Value and number of unpriced order backlog	\$2,845 4,752	\$2,525 4,491	\$2,385 4,377

Naval Plant Representative Offices (NAVPROs) are Contract Administration Services (CAS) activities required to administer an increasing number of contracts which generate a large backlog of overage orders. The level of backlog is over two billion and action has been taken to reduce it with increased end strength. Our ability to reduce backlog is dependent upon resources and the amount of work. With current resources we are achieving a return on our investment on total "goods and services accepted" through: cost savings (cost avoidance by timely contract negotiations), technical cost advisories provided to procurement contract officers, actual negotiations with the contractors, withholding of non-conforming materials, recoupment actions in defective pricing, breakout of spare parts, and increased competition. Intensified pricing will also be provided for more intensified review of subcontract costs, analysis of three year vice one year pricing history for each item included in the spares order and review of a larger sampling of the bill of material and proposed labor hours that appear in the contractor's proposal.

B. Project Management Office-AIR (PMOA)

Number of Programs Managed	48	48	48
Total funds managed (Dollars in Billions)	\$12.904	\$15.730	\$16.520
Funding actions initiated	12,597	14,122	14,616

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria (cont'd).

Management of Engineering  
Change Proposal Process.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Number of ECPs	3,625	3,452	3,587
Number of Government Furnished Items Managed	3,594	3,755	3,765

C. Theater Nuclear Warfare Project Office

PM-23, as the acquisition manager for theater nuclear warheads, does not have the normal performance milestones associated with contractor effort (e.g. annual fee determination or price determination for the next procurement lot). The actual acquisition of nuclear weapons is done by the Department of Energy. We help set requirements, justify the needs, resolve interface problems during development, evaluate for acceptance and establish logistic support capabilities.

Another area of involvement in acquisition is the EMPRESS II where DNA uses our technical assistance to run their pulser contract. We are also establishing a barge building/systems integration contract that will be administered by the Naval Sea Systems Command (NAVSEA). PM-23 will be budgeted under the Naval Sea Systems Command effective in FY 1986.

IV. Personnel Summary

A. <u>Military E/S</u>	<u>189</u>	<u>209</u>	<u>240</u>
Officer	174	190	213
Enlisted	15	19	27
B. <u>Civilian E/S</u>	<u>1,313</u>	<u>1,471</u>	<u>1,471</u>
USDH	1,313	1,471	1,471

Department of the Navy  
Operation and Maintenance, Navy  
Exhibit OP-5

Activity Group: Command and Administration  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Air Systems Command

I. Description of Operations Financed.

Command and Administration is responsible for the development, acquisition, improvement, and support of aircraft, aviation weapons and related equipment and support systems. Command and Administration functions are policy development, long-range planning and programming, management and distribution of resources, review and evaluation of programs and performance, implementation and management control of depot level aviation maintenance programs at the Naval Air Rework Facilities, support of aeronautical depot maintenance, review of acquisition and depot maintenance programs, and coordination of interservice depot maintenance.

Effective FY 1986, the Aviation Intermediate Maintenance Support Office (AIMSO) will be budgeted under Command and Administration. AIMSO is responsible for the management, coordination and development of technical projects which address various problems that degrade Intermediate level (I-level) maintenance. AIMSO advises the Chief of Naval Operations (CNO) and Commandant of the Marine Corps (CMC) on various problems, solutions, and alternative management methods to improve logistic system support for Intermediate Maintenance Activities (IMA's).

Command and Administration finances personnel compensation, travel, and other administrative and support services related to Command and Administration personnel.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986</u> <u>Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987</u> <u>Budget Request</u>	<u>Change</u>
Command and Administration	<u>23,514</u>	<u>22,346</u>	<u>22,943</u>	<u>28,247</u>	<u>24,099</u>	<u>-4,148</u>
Total, Command and Administration	23,514	22,346	22,943	28,247	24,099	-4,148

Activity Group: Command and Administration (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1986 Current Estimate	\$28,247
2. Pricing Adjustments	65
A. Civilian Health Benefits	(-11)
B. Average Grade Reduction	(-155)
C. Stock Fund	(1)
1) Non-Fuel	1
D. Other Pricing Adjustments	(230)
3. Functional Program Transfers	-741
A. Transfers In	(137)
1) Intra-Appropriation	
a) Transfer from the Naval Facilities Engineering Command for increased staffing to accomplish financial management, cost analysis, and other fiduciary responsibilities necessitated by disestablishment of the Naval Material Command.	
B. Transfers Out	(-878)
1) Intra-Appropriation	-878
a) Transfer to the Naval Air Atlantic Fleet and Naval Air Pacific Fleet of calibration support requirements associated with the disestablishment of Naval Air Systems Command detachments at those activities.	
4. Program Decreases	-3,472
A. Other Program Decreases in FY 1987	(-3,472)
1) Reductions associated with DON initiatives to streamline the organizational and program management structure of the Naval Material establishment (-781)	
2) Reduction in contract support costs at the Aircraft Intermediate Support Office (AIMSO) at Patuxent, Maryland (-2,192)	
3) Reduction in contractor support for computer and equipment maintenance, printing and reproduction, and other purchased services due to decreased support requirements at Naval Air Systems Command headquarters and at the Depot Maintenance Directorate at the Naval Aviation Logistics Center, Patuxent, Maryland (-499)	
5. FY 1987 President's Budget Request	\$24,099

Activity Group: Command and Administration (cont'd)

<u>III. Performance Criteria</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Number of Field Activities Supported	25	25	25
Total Civilian Population Supported	44,405	42,565	41,476
Total Military Population Supported	4,073	4,092	4,101
Total Funding Managed (dollars in billions)	\$16.543	\$18.609	\$20.561

<u>IV. Personnel Summary</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
<u>A. Military E/S</u>	<u>39</u>	<u>40</u>	<u>39</u>
Officer	31	34	34
Enlisted	8	6	5
<u>B. Civilian E/S</u>	<u>588</u>	<u>600</u>	<u>559</u>
USDH	588	600	559



Department of the Navy  
Operation and Maintenance, Navy  
Exhibit OP-5

Activity Group: Field Operations  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Air Systems Command

I. Description of Operations Financed

This activity group finances personnel and operating expenses required to develop long-range plans for the effective operation of naval aviation logistics systems; on-site instruction and training of organizational and intermediate level maintenance personnel, and technical documentation programs. This activity group also funds weapon system engineering and logistics support, secondary supply point functions, common military support functions, and operational support of the Navy Test Pilot School. Funds are provided at four major field activities: 1) Naval Aviation Logistics Center (NAVAVNLOGCEN); 2) Naval Weapons Engineering Support Activity (NAVWPNEGSPACT); 3) Naval Aviation Engineering Services Unit (NAESU); and 4) NAVAIR Technical Services Facility (NAVAIRTECHSERVFAC). These funds finance civilian personnel compensation, travel, automatic data processing, and related support costs required for engineering and technical support for Naval Air Systems Command and its designated project managers. Funding for the Operational Support-Field program is also provided for personnel salaries, benefits, travel, transportation, administrative and support services.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appro- priation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Operational Support-Field	82,632	84,122	86,080	83,866	83,752	-114
Military Support	5,669	5,250	5,155	5,155	4,723	-432

Activity Group: Field Operations (cont'd)

A. Sub-Activity Breakout (cont'd)

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appro- priation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Naval Aviation Logistics Center	22,792	22,021	22,123	20,738	20,500	-238
Weapon Systems Support (WSS)	107,558	96,411	96,101	93,251	89,531	-3,720
Test Pilot School (TPS)	15,646	16,668	16,257	16,403	16,150	-253
Naval Weapons Eng Support Activity	13,387	13,695	13,452	14,197	15,252	1,055
Naval Aviation Eng Support Unit	27,588	26,410	27,636	30,414	32,012	1,598
Naval Air Technical Services Facility	<u>10,145</u>	<u>9,081</u>	<u>8,566</u>	<u>9,519</u>	<u>9,232</u>	<u>-287</u>
Total, Field Operations	285,417	273,658	275,370	273,543	271,152	-2,391

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1986 Current Estimate		\$273,543
2. Pricing Adjustments		-993
A. Stock Fund		
1) Fuel	(-185)	
2) Non-fuel	(-15)	
B. Industrial Fund Rates	(-1,544)	
C. Average Grade Reduction	(-823)	
D. Civilian Health Benefits	(-77)	
E. Other Pricing	(1,651)	
3. Functional Program Transfers		187
A. Transfers-In	(187)	
1) Intra-Appropriation	187	
Military Support: Transfer from Atlantic Division, Naval Facilities Engineering Command of civilian personnel servicing functions to the Consolidated Civilian Personnel Office at Naval Air Rework Facility (NARF) Norfolk.		
4. Program Increases		5,941
A. Other Increases	(5,941)	
1) Operational Support Field:	2,583	
Increased emphasis for Buy Our Spares Smart (BOSS) initiatives. This increase will result in a breakout which complies with new legislative requirements. The end result is a reduction in price of a much larger proportion of Navy material purchases.		
2) Test Pilot School:	253	
Increase to support Aviation Depot Level Repairables		
3) Naval Weapons Engineering Support Activity:	981	
Increase in requirements for BOSS technical data review/validation. This increase is driven by the scheduled delivery of engineering drawings on the AV-8B program, increases in GFE equipment reviews, continuation of F/A-18 and SH-60B efforts and an across the board increase in the requirements for drawing validations necessary to achieve compliance with the Competition in Contracting Act (CICA). Additionally, greater attention has been placed on procurement request review to ensure that drawing review activities have		

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

been properly designated in NAVAIR contracts. This will result in an increase in drawing reviews in the FY 1987 time frame as deliverable data on these contracts is submitted for review.

- |                                                                                                                                          |       |
|------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 4) Naval Aviation Engineering Service Unit:                                                                                              | 1,926 |
| Increase in support of Navy Civilian Technical Specialists (NCTS) work years in lieu of Contractor Engineering Technical Support (CETS). |       |
| 5) Military Support:                                                                                                                     | 198   |
| Increase support of NAEC host responsibilities                                                                                           |       |

5. Program Decreases	-7,526
----------------------	--------

A. Other Program Decreases	(-7,526)
----------------------------	----------

- |                                                                                                                                                                                       |        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 1) Operational Support Field:                                                                                                                                                         | -2,656 |
| Civilian end strength reduction associated with Department of Navy initiatives to streamline the organizational and program management structure of the Naval Material establishment. |        |
| 2) Commercial Activities                                                                                                                                                              | -106   |
| Savings associated with conversion to contractor performance or in-house efficiencies resulting from commercial activities studies under OMB circular A-76.                           |        |
| 3) Savings attributable to more efficient and economical execution of workload experienced resulting from waiver of statutory end strength ceilings in FY 1985.                       | -319   |
| 4) Operational Support Field:                                                                                                                                                         | -1,330 |
| Reduction associated with Department of Navy initiatives to streamline the organizational and program management structure of the Naval Material establishment.                       |        |
| 5) Naval Aviation Logistics Center                                                                                                                                                    | -307   |
| Decreased Support of the SERMIS program                                                                                                                                               |        |
| 6) Weapon Systems Support:                                                                                                                                                            | -1,843 |
| Reduction in engineering investigations and analyses, logistics management and publication changes for SH-3, AV-8, A-7, A-6, A.4 A-3 E-Z program                                      |        |

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

7) Naval Aviation Technical Services Facility:	-282
Reduction in general support for ASO and the Naval Air Systems Command.	
8) Navy Test Pilot School	-683
Reduction in industrial fund purchases in support of the test pilot school.	
6. FY 1987 President's Budget Request	\$271,152

Activity Group: Field Operations (cont'd)

III. <u>Performance Criteria</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
<u>OSF</u>			
Number of Program Management Offices/ programs supported	44	45	45
Number of Requests for Cost Analyses/Estimates	957	1,034	1,117
Number of Engineering Change Proposals Staffed	3,571	3,777	3,989
Number of Test and Evaluation Master Plans (TEMPS) developed	145	160	180
Number of Systems Programs Managed (Life Cycle Mgmt)	6	6	6
Operational Support Field Personnel: Provide technical management support services necessary for 193 inservice aircraft and missile weapon systems and 44 programs currently in the development, production or major modification stage; wholly manage 7 families of products (support equipment, avionics, armaments, propulsion systems, training equipment, ship installations and aviation life support systems) and direct/manage subsidiary programs related to the life cycle of naval aviation material, i.e. Aviation Depot Level Repairables Program management.			
<u>NAVAVIONICEN</u>			
Support Provided for Military and Common Services Functions (Workyears)	2	2	2
Support Provided for Secondary Stock Point Function (Workyears)	23	24	23
<u>NAVAIRENGCEN</u>			
Number of Inter-Service Tenants Provided Support	19	19	19
Number of Active/Retired Military Personnel and Dependents Supported	6,000	8,500	8,500
<u>NAVAVNLOGCEN (Workyears)</u>			
Technical Support	81	81	81
Financial Management	58	58	58
Staff/Admin/Safety Mgmt	87	87	87
Management Support of Depot	97	97	97
Contracts	34	35	35
Information Resource Mgmt.	12	12	12
Total	369	370	370
<u>WSS (Number of Documents)</u>			
NAVAIR Bulletins	408	416	424
Publication Documentation	21,630	22,063	20,960
Modification Documents	1,567	1,599	1,549
Logistic Support Documents	4,990	5,140	4,883

Activity Group: Field Operations (cont'd)

III. <u>Performance Criteria(cont'd)</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Technical Documents	64,045	65,325	66,000
Reliability Centered Maintenance Documents	400	440	418
Acquisition Support Documents	410	410	398

Performance criteria for the Weapon Systems Support Budget can not only be measured by the number of documents completed, but by the type and magnitude of each task. The technical difficulty will vary from one task to another based on the complexity of the effort. (For example, an engineering investigation might take 1 direct man hour to complete or it may take 1500 direct man hours to complete.)

TPS

Number of TPS Aircraft Supported	35	33	33
Aircraft Maintenance M/Y	145	148	148
TPS Aircraft Flight Hours	8,200	7,290	7,290
Other Aircraft Flight Hours	1,410	1,410	1,351
Hours Per Month Per Instructor	22	22	22
Hours Per Month Per Student	15	15	15
Number of Pilots Trained	44	44	44
Number of Non-Pilots Trained	16	16	16
Number of Instructors	23	23	23

NAESU (Workyears)

<u>Mission of Aircraft:</u>			
Attack	100.6	115.2	114.5
Fighter	106.2	121.6	120.9
Patrol	95.0	108.8	108.1
Electronic Warfare	67.1	76.8	76.3
Rotary Wing	39.1	44.8	44.5
Anti-Submarine	28.0	32.0	31.8
Admin	114.0	114.0	114.0
SE/ATE	78.3	89.6	89.0
Other A/C	<u>44.7</u>	<u>51.2</u>	<u>50.9</u>
Total	673.0	754.0	750.0

Activity Group: Field Operations (cont'd)

III. Performance Criteria (cont'd)

NAVAIRTECHSERFAC

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Number of Technical Manuals Managed	36,000	38,500	40,000
Number of Technical Directives Reproduced	1,275	1,350	1,425
Number of Aeronautical Engineering Drawings Maintained (thousands of drawings)	9,100	9,800	10,500
Number of Items Required to be Identified as Breakout Candidates	26,000	26,000	26,000

IV. Personnel Summary

A. <u>Military E/S</u>	<u>499</u>	<u>515</u>	<u>581</u>
Officer	329	329	368
Enlisted	170	186	213
B. <u>Civilian E/S</u>	<u>3,458</u>	<u>3,355</u>	<u>3,395</u>
USDH	3,458	3,355	3,395



Department of the Navy  
Operation and Maintenance, Navy  
Exhibit OP-5

Activity Group: Logistic Support Activities  
Budget Activity: 7-Central Supply and Maintenance  
Claimant: Naval Air Systems Command

I. Description of Operations Financed.

Logistic Support Activities funding ensures effective support for aviation systems and equipment; provides reviews of systems in order to simplify, coordinate, or delete as necessary; provides for standardization and configuration control and ensures that reliability and maintainability are designed into aviation systems and equipment. This activity group provides funds for the following:

The Standardization program finances preparation of standardization documents necessary for the procurement and maintenance of major weapons systems, subsystems, equipment, and components relative to Naval aircraft. Use of standardized equipment reduces acquisition lead times and life cycle costs while improving operational readiness.

The Nuclear Weapons Safety and Security program supports the nuclear weapons delivery capabilities of U.S. Navy aircraft, their associated nuclear weapons and trainers, as well as NATO Nuclear Anti-Submarine Warfare (ASW) aircraft.

The Automatic Test Equipment (ATE) Test Programs Maintenance provides for maintenance of electronic software test programs used by intermediate level (ashore and afloat) and depot maintenance personnel. These test programs are written in computer language to provide the stimulus and response necessary for automatic testing, trouble-shooting and verification of weapon systems, engines, missiles and ATE.

The Automatic Test Equipment Center is responsible for performing ATE systems engineering and logistic services to ensure that ATE systems are provided to effectively satisfy application requirements and operational needs, and to ensure that technical, configuration, and logistics elements compatibility is maintained between the ATE systems and the avionics systems and subsystems being supported.

The Installation of Aviation Ground Support Equipment program involves the alteration of existing facilities to the extent necessary to receive aviation ground support equipment and ensure that it is totally operational in all respects.

The Electromagnetic Interference program (EMI) addresses EMI problems existing in fleet aircraft. Through aircraft class evaluations, fleet investigation teams, fleet EMI problem reporting, and EMI data base management, EMI problems are identified and solutions recommended.

The Contingency Reserve Aircraft program manages the storage and removal of aircraft and parts from aircraft that are in the Navy's active inventory at the Aerospace Maintenance and Regeneration Center (AMARC) at Davis - Monthan Air Force Base.

Activity Group: Logistic Support Activities (cont'd)

I. Description of Operations Financed (cont'd)

The Interservice Equipment Oil Analysis program provides technical support to oil analysis laboratories.

The Safety program supports safety management and engineering efforts necessary to support aircraft, weapons, and support systems for Naval Air Systems Command headquarters and its field activities.

The Navy Occupational Safety and Health programs are designed to prevent mishaps, reduce injury and property damage costs, improve employee morale and well being and ensure compliance with regulatory requirements.

The Material Disposal program reclaims parts and assemblies from stricken Navy aircraft at AMARC and Naval Air Rework Facilities. This program also provides for the reclamation and disposal of obsolete/damaged ground support equipment, obsolete tools and production equipment.

The Naval Aviation Logistics Command Management Information System (NALCOMIS) is a modern and effective management information system that will respond to aircraft maintenance and material management requirements aboard aircraft carriers, amphibious aviation helicopter assault ships (LPHs and LHAs), Marine aircraft group, and Naval/Marine Corps air stations. Specific objectives are to increase aircraft material readiness, reduce inventory loss and improve repairable turnaround time.

The Naval Aviation Logistics Data Analysis (NALDA) program provides the administration and cost for the maintenance of low and high speed remote terminals installed at all the necessary geographical locations in support of the entire Naval aviation logistics community to solve logistics and maintenance problems.

The Integrated Logistic Support (ILS) Management of Support Equipment (SE) program provides management information systems for aircraft and SE rework. It also supports inventory management, ILS management, and contractor maintenance engineering at the prime contractor and field activities for common SE, such as, avionics, handling and servicing, electronic warfare and ATE.

The Range Support program provides for logistic support of training range systems, for maintenance and operating costs of six telemetry receiving stations, installation of equipment for fleet training ranges, and support of the Tactical Aircraft Combat Training System (TACTS); for all costs necessary to support a fully instrumented range at the Pacific Missile Range Facility (PMRF); and, for costs associated with the Mobile Sea Range for instrumentation maintenance, target support, data collection systems, tracking systems, and the integration of systems for open ocean exercises.

Activity Group: Logistic Support Activities (cont'd)

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Group Breakout

	FY 1985	Budget Request	FY 1986 Appro- priation	Current Estimate	FY 1987 Budget Request	Change
Standardization	4,371	5,741	5,741	5,641	4,391	-1,250
Nuclear Weapons Safety & Security Ashore	2,231	2,694	2,691	2,691	2,648	-43
ATE Test Programs Maintenance	7,499	9,590	9,575	8,662	8,000	-662
Automatic Test Equipment Center	5,181	5,440	5,440	5,297	3,784	-1,513
Installation Aviation Ground Support Equip	1,298	3,601	3,594	2,228	1,345	-883
Electromagnetic Interference (EMI)	6,575	4,803	4,803	4,786	3,768	-1,018
Contingency Reserve Aircraft	3,846	3,193	3,193	3,917	5,004	1,087
Interservice Equipment Oil Analysis	927	720	720	720	711	-9
Safety	114	686	686	450	453	3
Navy Occupational Safety & Health (NAVOSH)	861	877	877	877	843	-34
Material Disposal	2,003	3,258	3,258	2,658	2,578	-80
Naval Aviation Logistics Command Information System (NALCOMIS)	18,525	16,028	15,599	27,499	23,767	-3,732
Naval Aviation Logistics Data Analysis (NALDA)	6,004	9,553	6,994	6,994	5,839	-1,155
Other Support Services	1,872	2,263	2,260	2,260	2,248	-12
ILS Mgmt of Support Equipment	15,780	22,498	22,483	23,962	23,234	-728
Range Support	37,361	47,812	47,574	44,764	41,214	-3,550
 Total, Logistic Support Activities	 114,448	 138,757	 135,488	 143,406	 129,827	 -13,579

Activity Group: Logistic Support Activities (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1986 Current Estimate	\$143,406
2. Pricing Adjustments	4,912
A. Stock Fund	( -10)
1) Non-Fuel	-10
B. Industrial Fund Rates	(1,250)
C. Other Pricing	(3,672)
3. Program Increases	1,099
A. Other Program Growth in FY 1987	(1,099)
1) Contingency Reserve Aircraft:	1,099
These funds support Aviation Depot Level Repairables (AVDLR) requirements for mobilization and withdrawal of aircraft.	
4. Program Decreases	-19,590
A. Other Program Decreases in FY 1987	(-19,590)
1) Savings projected from scheduled efficiency reviews.	-387
2) Standardization decrease in level of support for reduction of overage standardization documents and implementation of the Parts Control Program.	-1,324
3) Nuclear Weapons Safety Level of Effort reduction	-158
4) ATE Test Programs Maintenance reduction associated with test program set (TPS) maintenance actions and new TPS systems for the AV-8B, F/A-18 and SH-60B.	-1,028
5) ATE Center	-1,576
6) Installation Aviation GSE reduction associated with five (5) Marine Corps Reserve mobile maintenance facility installations.	-972
7) Electromagnetic Interference (EMI) reduction	-1,112
8) Interservice Equipment Oil Analysis level of effort reduction.	-2
9) Safety level of effort reduction	-7
10) NAVOSH:	-71
Reduction in courseware development for computer based training.	
11) Material Disposal:	-60
Reduction of AMARC workload associated with the aircraft routine reclamation program.	
12) NALCOMIS:	-4,832
This decrease is attributed to reduced costs associated with software development. In	

Activity Group: Logistics Support Activities (cont'd)

B. Reconciliation of Increases and Decreases(cont'd)

- FY 1986 the final portion of the NALCOMIS "Native Mode" software development contract will be completed (i.e. Organizational Maintenance Activity level software).
- |     |                                                                                                                                                                                                                                                                                                                                                                   |        |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 13) | NALDA:                                                                                                                                                                                                                                                                                                                                                            | -1,435 |
|     | This decrease results in a reduction to NALDA users in the functional wings, selected major intermediate maintenance activities, USMC field aviation units, and other naval aviation units directly associated with aviation readiness.                                                                                                                           |        |
| 14) | Other Support Services                                                                                                                                                                                                                                                                                                                                            | -118   |
| 15) | ILS Management of Support Equipment:                                                                                                                                                                                                                                                                                                                              | -1,416 |
|     | Reduction to the monitoring of support equipment assets.                                                                                                                                                                                                                                                                                                          |        |
| 16) | Range Support:                                                                                                                                                                                                                                                                                                                                                    | -5,092 |
|     | This decrease results in a reduction in many years of effort in support of telemetry operations at ordnance stations; a reduction in many years for in-house NIF support of the Mobile Sea Range (MSR) and the Pacific Missile Range Facility (PMRF) programs; and a reduction in contractor support for planning functions in support of PMRF and MSR functions. |        |

10. FY 1987 President's Budget Request

\$129,827

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria

FY 1985    FY 1986    FY 1987

Standardization (In Units)

A complete and accurate set of military specifications and standards is essential to establishing a complete technical data package for competitive reprocurments. Several of the items listed below have a direct impact on enhancing competition in NAVAIR acquisitions, particularly the DOD Parts Control Program implementation, Qualified Products List (QPL) actions, and projects to prepare new and/or update overage documents.

Project Completed DD-1585 Actions	760	900	800
QPL Actions	195	265	200
Standardization Document Improvement Proposal DD-1426	195	260	200
Engineering Support Request DD-339	150	210	160
Comment and Review Actions	1130	1400	1200
5 Year Overage Document Review Program	1020	1100	1000
International Standardization Document Program (Implementation Data) ASCC Air Std's/Working Parties, 10 11, 12, 14, 15, 17, 20 and 104; Air Std's Reviews	170	220	180
Military Documents Reviews re ASCC	170	220	180
NAVAIR Implementation Report Reviews for NATO Working Parties A1, AE, ASP, AA, GGS; NATO Documents Reviews	135	175	150
Military Documents Reviews re NATO	180	200	180
NAVAIR Contracts using DOD Parts Control Program	36	40	45
Computerization of System Spec references to facilitate tailoring	3	10	8
Metric Document Actions	70	120	100

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

FY 1985      FY 1986      FY 1987

Nuclear Weapon Safety and Security - Ashore

Engineering Assurance Tasks for  
Nuclear Certification of Out-of-  
Production Aircraft:  
(Number of Aircraft)

4                      4                      4

Basic Design Engineering Support  
of Weapons:  
(Number of Weapons)

7                      11                      11

Nuclear Safety Program (Includes all  
supporting logistics elements in  
the Stockpile to Target Sequences)  
Number of Weapon Systems Supported:

Domestic

7                      7                      7

Foreign

3                      3                      3

Safety Studies

5                      6                      5

ATE Test Programs Maintenance

This program maintains approximately 5,000 Test Programs Sets of  
which 2,300 maintenance actions are required each year.

(In Units of Test Program Sets)

Safety of Flight

80                      82                      82

Strategic/Tactical Avionics Systems

799                      808                      800

Multiple/Batch Processing of  
Similar Systems

600                      570                      359

Mission and Flight Essential Systems

80                      81                      81

ATE Center (In Units)

Engineering Change Proposals Reviewed

50                      60                      35

Field Bulletins Reviews

80                      80                      56

Support Equipment Requirements  
Data Packages

600                      600                      420

Automatic Test Equipment (ATE)  
Data Base Transactions

1,500                      1,500                      962

Test Program Sets Verifications

320                      325                      210

70060

Activity Group: Logistics Support Activities (cont'd)

III. <u>Performance Criteria (cont'd)</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Tailored Outfitting Lists Generations	360	365	225
Unsatisfactory Reports Processed	200	250	175
Publications/Work Packages Reviewed	140	150	105
Off-line Maintenance Procedures Work Packages	70	70	50
Central Processing Unit Hours Provided for Automatic Test Program Generation	12,500	13,900	9,730
ATE Software Change Requests Processed	150	160	115
ATE Tapes Replaced Due to Breakage and/or Burn-out	500	780	545
<u>Installation of Aviation GSE (Units)</u>			
Engine Test Systems	5	8	8
Flight Line Elec Distr Systems	-	-	4
Cryogenics Facilities	1	2	2
Mobile Maintenance Van Complexes	2	7	5
Generator Test Stands	2	7	4
Miscellaneous GSE Installations	5	5	5
NOTE: There is no direct correlation between the number of equipment installations and total cost of installation. A number of site-peculiar variables, i.e. soil conditions, building alteration requirements, length of primary utility runs, HVAC requirements, physical security requirements, etc. that determine cost of each installation. It is not unusual for there to be a substantial difference in cost of installing similar systems at different locations.			
<u>EMI</u>			
Aircraft (No. of A/C)			
Test Preparation	9	6	5
Evaluation	9	6	5
Test Analysis	9	6	5
Fleet Assist			
Fleet Investigation Team Visits (No. of Visits)	8	8	8



Activity Group: Logistics Support Activities (cont'd)

III. <u>Performance Criteria (cont'd)</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
EMI Data Base Develop, Maintain, Analyze (% completed)	60	80	80
EMI Test Capability Augment and Upgrade (3 year effort starting in FY 85) (% Completed)	35	70	100
Electromagnetic Environmental Effects Survey of Air Capable Ships and Air Stations (No. of Surveys)	-	1	-
<u>Contingency Reserve Aircraft (Units)</u>			
Inputs (A/C)	53	67	51
Withdrawals (A/C)	29	8	13
Maintenance in Storage (A/C)	1,220	1,016	1,016
Represervations (A/C)	49	22	50
Man Hours Required	70,517	58,007	79,406*

\*FY-87 Man hours increase while work load quantities decrease because:

- 1) Annual inspections, represervations and updated aircraft configurations are consuming additional manhours.
- 2) The processing time for the input of desert aircraft has been increased - AMARC is now performing in depth engineering evaluations upon arrival to assure all AVDLR material is in place or on order prior to acceptance.
- 3) Withdrawal, input processing and preservation hours vary by type model-series of aircraft. The more complex the systems the more manhours required for processing.

Interservice Equipment Oil Analysis (Units)

Joint Oil Analysis Labs supported	52	52	52
Carrier Type Labs Supported	27	27	27
Mobile Van Labs Supported	1	1	1

Safety (In Units)

Field Activities Receiving Training	26	26	26
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70062

Activity Group: Logistics Support Activities (cont'd)

III. <u>Performance Criteria (cont'd)</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Aircraft Contractor Safety Audits	2	3	2
Safety Inputs into Contracts	120	150	135
Safety Data Items Reviewed	190	200	195
Field Activity Safety Audits/Inspections	1	4	2
Spec/Standards Inputs	8	10	8
System Safety Investigations	6	10	6
Aircraft Project Safety Audits	2	6	4
Ordnance Safety Board Support	23	20	23
Engineering Change Proposal Analysis Support	2	10	3
<u>Navy Occupational Safety and Health (NAVOSH)</u>			
Number of Inspections Conducted	25	20	20
Number of Personnel Trained (000)	20	16	24
Reduction in Disability Frequency (%)	3	3	3
<u>Material Disposal (Units)</u>			
Aircraft Reclamation (SARDIP)	11	24	24
Engine Reclamation (RILOP)	69	68	315
Support Equipment Reclamations (SERP)	76	330	394
Routine Reclamation (A/C)	75	70	129
Strike-on-Arrival (A/C)	38	42	64
<u>NALCOMIS</u>			
Sites Implemented:			
Marine Aircraft Groups (MAGs)	7	4	-
Large Naval Air Stations	4	3	-
Medium Naval Air Stations	5	1	-
Small Naval Air Stations	3	-	-
Marine Corps Air Station	-	1	-
Carriers (CV's)	-	2	3

Scheduled Performance in FY 1986/1987.

FY 1986:

- Software development of NALCOMIS "Native Mode" at the Intermediate Maintenance Activity/Supply Support Center level
- Software development of NALCOMIS "Native Mode" at the Organizational Maintenance Activity level
- Software development and maintenance support by the Central Design Activity, NAVMASSO, for NRMM and "Native Mode"

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria FY 1985 FY 1986 FY 1987

- Site installation costs associated with FY-85 implementations
- SNAP hardware management

FY 1987:

- Software maintenance of NRMM
- Software maintenance of "Native Mode"
- Software maintenance support for NRMM & "Native Mode" by NAVMASSO
- Long-lead funding (i.e. site surveys/A&E drawings) for FY 88 sites
- SNAP hardware management
- (16) Retrofit Sites
- (18) NALCOMIS squadrons

NALDA

Sub-system/programs operated	6	8	6
Sub-system/programs maintained	6	8	6
Number of activities/users supported and trained.	242	294	250
Telecommunications lines/modems/multiplexes/controller	55	62	55
CPU/time-sharing usage cycles (MIL)	132	160	142
Reports maintained/modified/updated	460	516	480

Number of 3-M aviation maintenance transactions including maintenance performance, material and parts usage, flight and aircraft readiness statistics	44,400	48,000	48,000
-------------------------------------------------------------------------------------------------------------------------------------------------------	--------	--------	--------

Number of 3-M aviation report outputs for the fleet, headquarters commands, shore activities and support units:

<u>Recurring</u> (monthly/quarterly to approximately 1100 customers)	840	900	900
<u>On-Demand</u> (one-time)	900	960	960

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

FY 1985      FY 1986      FY 1987

Other Support Services

Security Alarm Systems  
(Number of Systems)

11              12              12

Back-up data/services to present  
the Navy's defense against contractor  
claims (Number of actions)

30              30              32

Aviation Weapons Long Range  
Logistic Plan (\$000)

425              428              400

ADP technical services in support of the  
Data General Computer System (\$000)

-              -              309

Support for Simulation Package for  
Evaluation by Computer Techniques,  
Readiness, Utilization and Maintenance  
(SPECTRUM) (\$000)

850              -              -

ILS Management of SE (W/Y)

NAVAIR Field Activities  
NAVORD Field Activities  
Commercial Effort

40              72              67  
55              59              55  
99              81              74

Range Support

Range Instrumentation:  
Range Instrumentation and Integrated  
Logistic Support (W/Y)

11              14              13

Telemetry Stations Supported

6              6              6

Range Installations\*

3              6              3

Tactical Aircraft Combat Training

System Integrated Logistic Support (W/Y)

6              9              8

\* Each installation varies in cost based on  
complexity and type of equipment and the  
installation site.

Pacific Missile Range Facility (PMRF):  
Range scheduling, safety, surveillance  
and operations (Civilian/Military  
W/Y at PMRF)

205              212              212

Activity Group: Logistics Support Activities (cont'd)

III. <u>Performance Criteria (cont'd)</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Range Services - Operations and Maintenance of Instrumentation Systems, Launch, Recovery, Photography, Data Collection and Reduction, and Base Facilities (Contractor W/Y)	438	456	456
Range improvements, software development and depot level maintenance of all technical equipment (Civilian W/Y at Pacific Missile Test Center)	40	40	30
Mobile Sea Range:			
Phase I Fleet Exercises	4	4	4
Target Operations	64	72	72
Fleet Exercises Instrumented	3	4	4
Ship Installation of Equipment/Vans	32	48	48
A/C Instr Packages Supported	20	65	65

IV. Personnel Summary (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>	<u>2</u>	<u>2</u>	<u>2</u>
Enlisted	2	2	2

Department of the Navy  
Operation and Maintenance, Navy  
Exhibit OP-05

Activity Group: Industrial Preparedness  
Budget Activity: 7-Central Supply and Maintenance  
Claimant: Naval Air Systems Command

I. Description of Operations Financed.

The Industrial Readiness program provides the capability to develop formal plans with industry for emergency production of weapon systems. The planning data provides the means to measure the responsiveness of private industry to produce critical weapon systems to meet the Navy's requirements in the event of mobilization or loss of capability due to fire, flood, strike or other national emergency. It plans for development of industrial production lead time and reduced requirements for industrial manpower and critical materials.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986</u> <u>Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987</u> <u>Budget Request</u>	<u>Change</u>
Industrial Readiness	2,391	-0-	-0-	923	384	-539

Activity Group: Industrial Preparedness (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1986 Current Estimate	\$ 923
2. Pricing Adjustments	37
A. Other Pricing Adjustments	(37)
3. Program Decreases	-576
A. One Time FY 1987 Decreases	(-576)
1) Reduction in planned surge mobilization contracts.	-576
4. FY 1987 President's Budget Request	\$384

III. Performance Criteria

Industrial Readiness (Number of Items)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Industrial Preparedness Planning	255	125	69
Surge Planning	6	6	2
Industrial Preparedness Measures	3	0	0
Stand-by Maintenance of Production			
Lines for Mobilization	2	1	1
Property Leasing for Industrial			
Use at Reserve Plants	1	0	0
Protection at Reserve Plants	1	1	1
Packing, Crating and Handling of			
Special Tooling & Test Equipment	3	4	4
DOD Support	1	0	0

IV. Personnel Summary.

Not Applicable.

Department of the Navy  
Operation & Maintenance, Navy  
Exhibit OP-5

Activity Group: Engineering and Support Services  
Budget Activity: 7-Central Supply and Maintenance  
Claimant: Naval Air Systems Command

I. Description of Operations Financed

Engineering and Support Services finances engineering and logistical support for aircraft launch and recovery, visual landing aids, wind measurement and aircraft/ship interface management; installation and modernization of airfield lighting and marking systems, emergency arresting gear and visual approach guidance systems; engineering and technical services in support of the Navy/Marine Corps mission; design and maintenance engineering for all in-service ground support equipment; and design engineering effort associated with generating remedial design changes essential to operational readiness of in-service fleet aircraft and related equipment.

This activity group provides for reliability and maintainability implementation during the conceptual, validation, development, and production phases of major programs; service life extension of specific aircraft models or series; the preparation, update, reproduction and distribution of technical weapon systems manuals; and the investigation of deficiencies involving aviation life support equipment.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout.

		FY 1986			FY 1987	
	<u>FY 1985</u>	<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	<u>Change</u>
Expeditionary Airfields	10,040	5,915	5,907	6,907	6,702	-205
Shorebased Landing Aids	2,835	3,201	3,197	3,197	2,794	-403
Aviation Mobile Facilities	4,247	5,424	5,424	6,411	7,192	781



Activity Group: Engineering and Support Services (cont'd)

A. Sub-Activity Breakout (cont'd)

		FY 1986			FY 1987	
	<u>FY 1985</u>	<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	<u>Change</u>
Aircraft Structural Life Surveillance	5,579	7,912	7,905	7,405	6,748	-657
Ground Support Equip Engineering Support	10,054	9,659	9,659	9,372	7,056	-2,316
Survival Equipment	2,812	4,168	4,268	3,968	2,987	-981
Technical Publications	16,736	19,956	19,922	19,922	23,408	3,486
Catapults and Arresting Gear	24,367	19,472	19,466	27,184	22,186	-4,998
Reliability and Maintainability	1,518	1,551	1,551	1,526	1,955	429
Engineering Services	<u>23,655</u>	<u>22,144</u>	<u>22,237</u>	<u>21,802</u>	<u>13,169</u>	<u>-8,633</u>
Total Engineering & Support Services	101,843	99,402	99,536	107,694	94,197	-13,497

Activity Group: Engineering and Support Services (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1986 Current Estimate		\$107,694
2. Pricing Adjustments		2,913
A. Industrial Fund Rates	(1,108)	
B. Other Pricing Adjustments	(1,805)	
3. Program Increases		4,261
A. Other Program Growth in FY 1987	(4,261)	
1) Technical Publications:	3,116	
Increase provides for update and revision to operational, maintenance and repair manuals pertaining to in-service aircraft, (including the S-3, P-3, and AV-8), engines, and components, and update of technical manuals that pertain to ordnance, missiles, avionics, and ground support equipment. This increase reduces the backlog of technical manuals requiring updating.		
2) Mobile Facilities:	717	
Increase supports rapid deployment capabilities of the Marine Corp by configuring mobile facilities in the backlog.		
3) Reliability and Maintainability:	428	
Provides for the Product Deficiency Reporting Evaluation Program, a deficiency reporting network which identifies the Navy's defective material problems.		
4. Program Decreases:		-20,671
A. Other Program Decreases in FY 1987	(-20,671)	
1) Reduction in programmatic costs resulting from more efficient utilization of resources. Performance indicators are not affected by this reduction.	-447	
2) Savings attributable to more efficient and economical execution of workload experienced resulting from waiver of statutory end strength ceilings in FY 1985.	-313	
3) Shorebased Landing Aids: Reduction in lighting system installations and modernizations.	-531	
4) Ground Support Equipment: Reduction of fleet revealed deficiency investigations, reduced response to design changes, reduction in number of program planning documents revised,	-2,444	

Activity Group: Engineering and Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

- and reduction in number of support equipment requirement data packages and procurement data packages processed.
- 5) Survival Equipment: -1,051  
Reduction for the Anti-Exposure Coverall, Helicopter Emergency Escape Device, and all priority II engineering change proposals.
  - 6) Engineering Services: -9,181
    - a) Reduction for COMOPTEVFOR follow on operational test and evaluation OT-III.
    - b) Reduction for design engineering investigations, fleet problem solving, and configuration management for the parachute Sea Water Activated Release System, On-Board Oxygen Generating System, BSU-85/B bomb retarder, FMU-139/B and FMU-140/B fuzes, 20 MM Multipurpose Ammunition, AIM-54C PHOENIX, AGM-65E/F MAVERICK, AGM-114B HELLFIRE, WALLEYE extended range data link, CBU-78/B GATOR, F/A-18A and HARM and MAVERERICK launchers.
  - 7) Aircraft Structural Life Surveillance: -908  
Reduction in Structural Appraisal of Fatigue Effects (SAFE) program for a helicopter fatigue monitoring system.
  - 8) Catapults and Arresting Gear: -5,413  
Program decrease for In-Service Engineering for operational fleet carriers, air capable ships/amphibious ships and shore activities. Reductions in efforts for maintenance engineering, problem investigation, quality assurance and integrated logistic support that supports design and upgrading of fleet aircraft launch and recovery equipment.
  - 9) Expeditionary Airfields: -383  
Reduction in In-Service Engineering efforts required to support designated efforts to correct deficiencies and upgrade of EAF equipment.

5. FY 1987 President's Budget Request

\$94,197

Activity Group: Engineering and Support Services (cont'd)

<u>III. Performance Criteria and Evaluation</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
<u>Expeditionary Air Fields</u>			
In-Service Engineering (WYs)	23	16	4
Field Technical Services (WYs)	13	13	14
Expeditionary Airfield Equipment Maintenance/Resurface AM-2 matting (\$000's)	6,663	3,731	4,940

FY-85 effort is for matting at Twentynine Palms, CA and Bogue Field, NC; FY-86 effort is for matting at Cheatham Annex, VA; FY-87 effort is for matting at Port Hueneme, CA.

Shorebased Landing Aids

Arresting Gear Installations	2	0	0
Lighting Systems Installations	15	14	10
Lighting Systems Modernizations	1	15	8

Aviation Mobile Facilities

Number of Mobile Facilities Configured	168	273	308
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Aircraft Structural Life Surveillance Program

<u>Structural Appraisal of Fatigue Effects Program (SAFE)</u>	<u>Aircraft in Program</u>		
Maintenance of Basic Data File (Flight Loads Data)	5,000	5,000	5,000
Data Analysis and Reporting In-House Program/Fleet Support	3,500	3,850	3,950
SAFE Program Expansion (New Aircraft into SAFE)	4 models A-4F OA-4M UP-3A KC-130T	4 models A3 F-18 A-4E F-4S	2 models

Service Life Assessment Program/Service Life Extension Program (SLAP/SLEP)

<u>SLAP and/or SLEP Requirement Investigations, SLEP Specifi- cation Preparation, Structural Tests</u>	<u>A/C Models in Program</u>		
	7	10	8

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria(cont'd)

FY 1985

FY 1986

FY 1987

Performance criteria for the SLAP/SLEP Program are measured not only by the number of aircraft models in the program, but by the type and magnitude of the effort for each of the models. Programs requiring structural tests, for example, require effort level and program costs appreciably greater than those for analytical work.

Survival Equipment Engineering

Recurring functions provided by the field include review and approval of engineering change proposals (ECPs), analysis of reported failures or defects, quality control, and technical review pertaining to aviation life support equipment.

In the case of Aviation Life Support Systems, (ALSS) there are two measures of effectiveness.

1. Recurring functions necessary to accomplish the responsibilities assigned by NAVAIRSYSCOM.
2. ECP effectiveness in accordance with the following ALSS priority definitions.
  - a. Priority I - Aircrew Life Saving
  - b. Priority II - Operational Readiness
  - c. Priority III - Cost Saving

The ECP effectiveness and complexity and not the number of ECP's has to be considered in that some ECP's which do not require additional modification kits result in many ECP's for a given dollar value.

Number of ECP starts:

Priority I	4	11	0
Priority II	50	50	0

Number of ECP's completed:

Priority I	3	5	0
Priority II	20	40	0

Number of ECP's continued:

Priority I	11	8	0
Priority II	40	40	0

Number of items approved for production:

Started	N/A	2	0
Completed	N/A	0	0
Continued	N/A	N/A	2

Activity Group: Engineering and Support Services (cont'd)

<u>III. Performance Criteria and Evaluation</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
<u>Technical Publications</u>			
Number of Technical Manual pages to be updated for in-service out-of-production Weapon Systems	104,000	101,169	105,200
Fixed Expenses (includes Reprints, Rapid Action Minor Engineering Changes, Engineering Data Maintenance Information Control System, and Navy Technical Information Presentation System) (\$000)	3,500	6,472	7,408
<u>Catapults and Arresting Gear</u>			
In-Service Engineering/ Fleet Problem Response (WYs)	116	132	121
Fleet Technical Services (WYs)	42	49	44
Test Site Maintenance & Repair (\$000)	500	0	0
4R Cog Depot Repair (\$000)	2,027	2,180	2,092
Aircraft Ship Compatibility (WYs)	21	21	19
ACLS Certification (Ships/Air Stations) (\$000)	2,500	1,830	1,757
Fire Fighting and Rescue (WYs)	4.5	8	8
<u>Ground Support Equipment Engineering Support</u>			
Number of Program Planning Documents to be Revised/Issued	1,106	1,046	760
Number of Fleet Revealed Deficiencies to be Investigated:	7,861	6,643	4,940
Number of Design Changes to be issued:	561	531	342
Number of Support Equipment Requirement Data Packages to be Processed:	4,951	4,687	4,180
Number of Procurement data packages to be revised/produced:	5,348	5,081	4,180
Number of Pre-award Surveys to be conducted:	1,026	1,135	950
Number of Proposals/Bids to be evaluated:	2,227	2,466	3,605

Activity Group: Engineering and Support Services (cont'd)

III. <u>Performance Criteria</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
<u>Engineering Services</u>			
Major categories of Basic Design Engineering (BDE) functions performed:			
Number of:			
Resolve Design Deficiencies and Fleet Problems Entered in the Airborne Weapons Corrective Active Program (AWCAP)	850	850	600
Perform Engineering change related actions; e.g., Prepare/Review/ Process Engineering Change Proposals, Design Change Notices, Waivers/Devia- tions, Beneficial Suggestions, Deficiency Reports	2,591	2,624	2,000
Incorporate Approved Changes and Other Up-date Actions Into Baseline Technical Data Packages; e.g. Drawings, Specifications, Parts Lists, etc. (Total Inventory of Approximately 87500 Data Packages)	1,415	1,426	1,100
Generate Engineering Source Data to Update Materials and Processes Specifications	248	249	170
Respond to Fleet Requests for On-Site Engineering Assistance.	140	133	135
Perform Type-Life/Service Life Extension Tests of Explosive Components.	12	12	12
Generate Updated Source Data for Technical Manuals	79	85	60
Generate Updated Source Data for Aircraft Tactical Manuals (Naval Warfare Publications 55 Series)	30	27	32
Respond to Ballistics Data Requests from Fleet and NAVAIR Activities	75	75	75
Perform Safety Studies/Investigations	50	50	50
Support Conduct of Follow-on Test and Evaluation OT-III by OPTEVFOR (separate tests)	11	8	8

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria

FY 1985

FY 1986

FY 1987

Reliability & Maintainability

Work-years of Engineering  
Support

10.8

13.0

20.7

IV. Personnel Summary. Not Applicable



Department of the Navy  
Operation and Maintenance, Navy  
EXHIBIT OP-5

Activity Group: Contractor Technical and Maintenance Support  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Air Systems Command

I. Description of Operations Financed

This activity group provides Contractor Engineering and Technical Maintenance Support Services (CETS) to Fleet Air Type Commanders' aviation maintenance personnel at the organizational and intermediate levels of maintenance to elevate the technical skills of enlisted maintenance personnel to a point where they are capable of doing the maintenance on weapon systems and equipment required for operational readiness. The CETS services are provided by Contractor Field Services (CFS) representatives furnished by DOD contractors. These CFS representatives provide instruction, information and training in the installation, operation and maintenance of weapon systems, equipment and components and may use hands-on training incidental to other forms of training to demonstrate functions associated with a particular task during the instructional process.

The C-2 Contract Support program supports the C-2 aircraft's primary role of providing rapid response to the personnel/critical supply requirements of carrier task groups. The CNO standard of Mission Capability (MC) must be attained, sustained, and preferably exceeded to fulfill the C-2A role as a primary link in the Fleet logistics pipeline. Cumulative effects of aircraft age, lack of manpower and available skills, and control of limited supply assets have contributed to C-2A MC problems. Contractor support enables attainment of increased MC, approaching the CNO standard.

Contractor Maintenance Support (CMS) consists of three related programs:

1) Post MSD contractor services are required to support the operations of a Wholesale Support Site (WSS) that concentrates all F/A-18 unique wholesale material at dedicated sites, NAS Lemoore on the west coast and NAS Cecil Field on the east coast. Contractor services are also required at ASO to perform distribution control functions of WSS material. The WSS program maximizes material availability by means of a real time data base, intensive expediting, and positioning of wholesale assets close to both users and repair sources; 2) CMS for peculiar and common avionic equipment/hardware provide for on-site personnel to support bondroom management, configuration and inventory control, and reporting functions; 3) CMS for Support equipment provides for inventory control and logistic support of peculiar support equipment. These efforts include providing on-the-job training to fleet personnel prior to the establishment of formal schools, management of spares/repair parts, and maintenance of interim factory test equipment.

Activity Group: Contractor Technical and Maintenance Support (cont'd)

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

		FY 1986			FY 1987	
	<u>FY 1985</u>	<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	<u>Change</u>
CETS	75,407	84,777	84,553	75,832	70,488	-5,344
CMS	21,050	43,828	43,828	43,296	19,971	-23,325
C-2 Contract Support	<u>1,601</u>	<u>2,366</u>	<u>2,361</u>	<u>1,806</u>	<u>1,900</u>	<u>94</u>
Total, Contractor Tech & Maint Spt	98,058	130,971	130,742	120,934	92,359	-28,575

Activity Group: Contractor Technical and Maintenance Support (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1986 Current Estimate	\$120,934
2. Pricing Adjustments	4,838
A. Other Pricing Adjustments	(4,838)
3. Program Increases	21
A. Other Program Growth in FY 1987	(21)
1) C-2 Contract Support increase in contractor workyears	21
4. Program Decreases	-33,434
A. Other Program Decreases in FY 1987	(-33,434)
1) Contractor Engineering Technical Support reduction of 84.2 workyears of CETS effort.	-8,377
2) Contractor Maintenance Support -	-25,057
a) Phase out of CMS as organic capability is established	(-5,082)
b) Enhanced Comprehensive Asset Management System (ECAMS) decreases as Navy personnel operate/maintain systems, phasing out contractor support of ECAMS	(-4,301)
c) Decrease in other prime contractor, local contractor and field activity phased support efforts as organic capability is established	(-4,036)
d) Eliminate interim support funding of common avionics that have reached organic capability	(-325)
e) Reduced facilities maintenance of bond room facilities	(-1,113)
f) Reduction in number of Logistics Support Representatives (LSRs)	(-845)
g) Reduced efforts for maintenance and operation of test sets for F/A-18 Radar Test Stations	(-9,355)
5. FY 1987 President's Budget Request	\$92,359

Activity Group: Contractor Technical and Maintenance Support (cont'd)

III. Performance Criteria

Contractor Engineering and Technical Services (CETS)

<u>Aircraft Mission</u>	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	<u>MY</u>	<u>\$000</u>	<u>MY</u>	<u>\$000</u>	<u>MY</u>	<u>\$000</u>
Attack	136.5	12,187	116.6	10,571	106.0	9,931
Fighter	183.5	17,966	168.3	16,933	153.6	16,048
Patrol	32.5	2,586	32.0	2,593	28.0	2,348
Anti-Sub	132.6	12,546	136.5	13,377	120.0	12,207
Rotary Wing	69.7	5,481	60.0	4,841	52.0	4,348
Electronic Warfare	122.6	11,608	123.0	11,890	112.5	11,251
SE/ATE	96.1	9,351	125.7	12,719	107.0	11,515
Other	41.9	3,682	30.2	2,908	29.0	2,840
TOTAL	815.4	75,407	792.3	75,832	708.1	70,488

<u>Contractor Maintenance Support (CMS):</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
No. of Bases Supported	10	23	47
No. of Squadrons Supported	20	61	108
No. of Aircraft Supported	185	749	1,385
No. of Flight Hours	63,751	285,297	570,420
No. of PGSE Maintenance Workyears		17,273	9,000

<u>C-2 Support Services:</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Contractor Maintenance/Logistic Support at "O" and "I" Levels (WORKYEARS)	21	17	17.5

IV. Personnel Summary. (End Strength)

Not Applicable

Department of the Navy  
Operation & Maintenance, Navy  
Exhibit OP-5

Activity Group: ASW System Support  
Budget Activity: Central Supply and Maintenance  
Claimant: Naval Air Systems Command

I. Description of Operations Financed

This activity group finances expenses required to conduct fleet exercises, to increase the reliability and maintainability of the Fleet In-Service ASW Avionics systems, to provide sonobuoys, to maintain Advance Signal Processor (ASP) common software and hardware configuration control, and to provide for the procurement and updating of the test systems and related equipment required during the preproduction testing of sonobuoys. Detailed explanations of these efforts follow:

A. Air Effectiveness Measurement Program (AIREM)

The principal objectives of this program are threefold as reaffirmed by CNO letter dated 15 July 1982. They are the conduct of fleet exercises for the purpose of:

1. Measuring effectiveness of air ASW platforms in order to provide the chief of Naval Operations (OP-095) accurate, current assessments of individual weapon system capability.
2. Identify deficiencies in current air ASW systems and sensors through the collection of specific technical data for assessment by cognizant authorities.
3. Recommending potential solutions and prioritization of weapon system improvement requirements.

The quantitative assessments are obtained through fleet exercises and under controlled conditions in open ocean areas and on instrumented 3-D ranges such as the Atlantic Undersea Test and Evaluation Center and Barking Sands Tactical Underwater Range. AIREM program has been transferred to Space and Warfare Systems Command in FY 1986.

B. AIR ASW Fleet Support

The objectives of the Air ASW Fleet Support Program are to increase the reliability and maintainability of the Fleet In-Service ASW Avionics systems installed in the P-3, S-3, SH-2 and SH-3 aircraft. The effort supported under this program is directed toward statistical analysis, investigations, test and evaluation, and engineering design of corrective fixes of items in the operational inventory for the purpose of extending the useful military life of such items within the current performance envelope.

The activities involved in the program include the Naval Air Test Center (NATC) Patuxent River, MD; the Naval Air Development Center (NADC) Warminster, PA; and contract engineering support.

Activity Group: ASW Systems Support (cont'd)

C. Sonobuoy Support

The primary objectives of this program are to provide the operational Navy with sonobuoys that conform to specified performance and reliability levels and to provide on-going operational support as required. To this end, a comprehensive quality assurance and reliability program consisting of both laboratory and open ocean testing has been established. This test program is conducted during pre-production, production and acceptance phases and supports a procurement program which is over \$300 million annually. The quantity of sonobuoys being procured annually is approximately 600,000 from five different manufacturers, which produce five different type buoys uniquely designed to Navy performance specifications. Other efforts conducted under this program include technical management of all test and evaluation efforts, engineering investigations of fleet reported problems, engineering tests and reliability disciplines.

The activities involved in this program include the Naval Avionics Center, Indianapolis, Indiana; The Naval Air Development Center, Warminster, PA; the Naval Weapons Support Center, Crane, Indiana and the Sonobuoy Quality Assurance Facility at St. Croix, U.S. Virgin Islands along with associated vessels and aircraft.

D. Software Maintenance

The objective of this program is to maintain Advanced Signal Processor common software and hardware configuration control, fleet hardware failure analysis, reliability and maintainability analysis, provide Life Cycle support for common software and make ASP common software available to the users of the AN/UYS-1, which is the standard acoustic signal processor, include P-3C Update III, and C Mod, LAMPS III (Aircraft and Ship) TACTAS (SQR-19), SURTASS, TASPE, BQQ-5, SQS-53, and S-3(B).

Air Common Acoustic Processing (ACAP) is the ASP common operational software for the S-3, P-3, and LAMPS programs which is currently being developed. This software will provide the Air ASW fleet with the acoustic processing capability to meet the projected threat. The first phases of this software reached the fleet in FY 1984 and will require maintenance to resolve deficiencies, interface changes, etc.

Activity Group: ASW Systems Support (cont'd)

E. Sonobuoy Special Test Equipment

The objective is to provide for the procurement and updating of the test systems and related equipments that are required during the preproduction testing of sonobuoys. The validity of the data gathered during this testing is dependent upon the reliability and quality of the test complex. To insure that the test facilities that comprise the test complex are adequately instrumented to test the performance and reliability of the present and future sonobuoys, the procurement of new equipment and the updating of the present systems are necessary. The test complex consists of three facilities - NWS Crane IN; NADC Warminster PA; and the Sonobuoy Quality Assurance Facility, St. Croix, U.S. Virgin Islands.

II. Financial Summary(Dollars in Thousands)

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Airborne ASW Support	9,111	5,206	4,010	5,687	5,705	-18
Total	9,111	5,206	4,010	5,687	5,705	-18

Activity Group: ASW Systems Support (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1986 Current Estimate	\$5,687
2. Pricing Adjustments	354
A. Industrial Fund Rates	(302)
B. Other Pricing Adjustments	(52)
3. Program Increases	1,225
A. Other Program Growth in FY 1987	(1,225)
Increase for Air Common Acoustic Processing	1,225
(ACAP) software support.	
4. Program Decreases	-1,561
A. Other Program Decreases in FY 1987	
Reduction in Sonobuoy Special Test Equipment	(-1,201)
Support.	
Reduction in Air Effectiveness Measurement	(-360)
Program (AIREM) Support.	
5. FY 1987 President's Budget Request	\$5,705



Activity Group: ASW Systems Support (cont'd)

III. Performance Criteria

	FY 1985		FY 1986		FY 1987	
	W/Y	(\$000)	W/Y	(\$000)	W/Y	(\$000)
<u>AIREM</u>						
Exercise Analysis	10.0	902				
Range Services		264				
Exercise Support		160				
Integrated Rainform						
Analysis System (IRAS)	2.9	263				
Total	12.9	1,589		0		0
<u>AIR ASW Fleet Support</u>						
Eng. Test & Eval.	17.0	1,079	15.5	933	7.3	461
Program Eng. Coordination	1.0	40	.8	30	.7	35
Helicopter Sonar	.9	45	.7	35	1.3	84
Sonobuoy Receivers	1.0	40	.8	35	.7	49
ASW Data Links						
Acoustic Signal Processors	1.9	105	-	-	1.5	97
ASW Radar						
Magnetic Anomaly Det.	3.0	310	.1	16	.8	52
ASW Tape Recorders	4.1	300	1.6	106	3.4	216
Tactical Navigation	1.6	114	1.3	45	1.3	108
Tactical Displays	1.5	108	.6	30	.5	24
Electronic Warfare	4.0	200	-	-	.9	72
Total	36.0	2,341	21.4	1,230	18.4	1,198
<u>Sonobuoy Support</u>						
Production Quality Assurance						
Testing Support (Includes						
Range Government Rep., Fuel,						
NAS Brunswick, Test Mgmt						
Support)	18.7	1,681	10.8	974	10.3	967
Contractor		350		300		300
ILS		150		-		-
Total		2,181		1,274		1,267
<u>Software Support</u>						
NADC Common Software						
Support	16.6	1,411	10.0	900	6.3	600
ACAP Support	8.0	883	7.4	670	17.9	1700
Computer Time		706		400		664
Total	24.6	3,000	17.4	1,970	24.2	2,964

Activity Group: ASW Systems Support (cont'd)

III. Performance Criteria

FY 1986

FY 1987

Sonobuoy Special Test Equipment  
Test Range Equipment

\$1,213

\$ 276

Total

\$5,687

\$5,705

IV. Personnel Summary

Not Applicable

Department of the Navy  
Operation and Maintenance Navy  
Exhibit OP-5

Activity Group: Maintenance of Real Property  
Budget Activity: 7-Central Supply and Maintenance  
Claimant: Naval Air Systems Command

I. Description of Operations Financed.

Maintenance of Real Property funds provide for facilities maintenance to NAVAIR field activities under each respective host-tenant agreement. The Naval Air Engineering Center (NAEC) at Lakehurst, New Jersey is the only NAVAIR activity which does not operate under a tenant status; NAEC is a host activity for the entire Lakehurst Naval Base.

Minor Construction funds finance the following two areas:

- 1) Minor Construction (Equipment Installation) - The costs for work directly related to the installation of equipment, i.e., secondary utilities, special foundations and pads, equipment air conditioning, etc., that are required for the equipment to operate, are defined as Equipment Installation costs.
- 2) The costs for all other work that is not directly related to the installation of the equipment, but is required for the equipment to function in its intended operational environment, i.e., primary utilities, area lighting, personnel, air conditioning, security fencing, etc., are defined as construction costs and limited to \$200K per project. These funds are disbursed to O&M,N activities (Naval Aviation Logistics Center, Patuxent River; Naval Aviation Technical Services Facility, Philadelphia; Naval Aviation Engineering Center, Lakehurst; and Pacific Missile Range Facility, Barking Sands).

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appro- priation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Maintenance of Real Property	4,210	3,295	10,793	10,814	4,040	-6,774
Minor Construction						
Total	<u>2,255</u>	<u>2,722</u>	<u>2,918</u>	<u>2,993</u>	<u>3,858</u>	<u>865</u>
Maintenance of Real Property	6,465	6,017	13,711	13,807	7,898	-5,909

Activity Group: Maintenance of Real Property (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1986 Current Estimate		\$13,807
2. Pricing Adjustments		430
A. Industrial Fund Rates	(137)	
B. Other Pricing Adjustments	(293)	
3. Program Increases		747
A. Other Program Growth in FY 1987	(747)	
1) Minor Construction:		
Increase provides for minor construction		
for the following projects:		
three (3) mobile maintenance van complexes,		
three (3) engine test stands, and		
three (3) generator test stands.		
4. Program Decreases		-7,086
A. One Time FY 1986 Costs	(-7,086)	
1) Maintenance and Repair Real Property:	-7,086	
This decrease represents a reduction		
in special maintenance projects.		
5. FY 1987 President's Budget Request		\$7,898

III. Performance Criteria

Maintenance of Real Property

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Backlog, Maintenance/Repair (\$000)	17,875	16,530	16,600
Total Buildings (KSF)	2,171	2,171	2,171

IV. Personnel Summary. (End Strength)

Not applicable

Department of the Navy  
Operation and Maintenance, Navy  
Exhibit OP-5

Activity Group: Base Operations  
Budget Activity: 7-Central Supply and Maintenance  
Claimant: Naval Air Systems Command

I. Description of Operations Financed.

Base Operations funds provide for utility operations, other engineering support, Base Communications, and morale, welfare and recreation support at Naval Air Systems Command (NAVAIR) field activities under each respective host-tenant agreement. The Naval Air Engineering Center (NAEC) is the only NAVAIR activity which does not operate under a tenant status. NAEC is a host activity for the entire Lakehurst, New Jersey Naval Base.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

		FY 1986			FY 1987	
	FY 1985	Budget Request	Appro- priation	Current Estimate	Budget Request	Change
Other Base Services	0	0	0	0	23,442	23,442
Morale, Welfare and Recreation Activities	108	124	124	124	3,518	3,394
Utility Operations	2,755	3,130	3,080	3,109	4,348	1,239
Other Engineering Support	1,903	1,629	1,620	1,634	3,979	2,345
Base Communications	<u>3,195</u>	<u>3,616</u>	<u>3,616</u>	<u>3,635</u>	<u>4,395</u>	<u>760</u>
Total, Base Operations	7,961	8,499	8,440	8,502	39,682	31,180

Activity Group: Base Operations (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1986 Current Estimate	\$8,502
2. Pricing Adjustments	265
A. Industrial Fund Rates	(59)
B. Other Pricing Adjustments	(206)
3. Program Increases	32,399
A. Other Program Growth in FY 1987	(48)
1) Morale Welfare and Recreation Activities: Increase to fund cost increases in support of military child care facilities.	
2) Other Base Services - Transfer of previously budgeted Base Operating support requirements from the RD&E,N appropriation for the following activities: Pacific Missile Test Center, Naval Air Test Center and the Naval Evaluation Weapons Facility.	(23,442)
3) Morale Welfare and Recreation Activities - Transfer of previously budgeted Base Operating support requirements from the RD&E,N appropriation for the following activities: Pacific Missile Test Center, Naval Air Test Center and the Naval Evaluation Weapons Facility.	(3,344)
4) Utility Operation - Transfer of previously budgeted Base Operating support requirements from the RD&E,N appropriation for the following activities: Pacific Missile Test Center, Naval Air Test Center and the Naval Evaluation Weapons Facility.	(2,022)
5) Other Engineering Support - Transfer of previously budgeted Base Operating support requirements from the RD&E,N appropriation for the following activities: Pacific Missile Test Center, Naval Air Test Center and the Naval Evaluation Weapons Facility.	(2,837)
6) Base Communications - Transfer of previously budgeted Base Operating support requirements from the RD&E,N appropriation for the following activities: Pacific Missile Test Center, Naval Air Test Center and the Naval Evaluation Weapons Facility.	(706)
4. Program Decreases	-1,484
A. One-Time FY 1986 Costs	
1) Other Engineering Support	(-522)

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FISCAL YEAR 1987 SU. (U) OFFICE OF THE COMPTROLLER  
(NAVY) WASHINGTON DC FEB 86

DEPARTMENT OF THE NAVY JUSTIFICATION OF ESTIMATES FOR  
FISCAL YEAR 1987 SU. (U) OFFICE OF THE COMPTROLLER  
(NAVY) WASHINGTON DC FEB 86

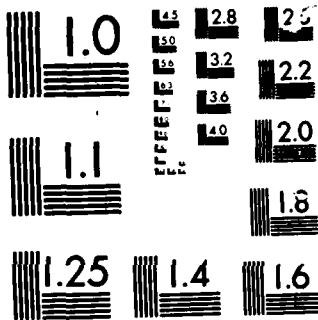
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MICROCOPY

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Activity Group: Base Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

2) Base Communication	(-90)	
3) Utility Operation	(-872)	
5. FY 1987 President's Budget Request		\$39,682

Activity Group: Base Operations (cont'd)

<u>III. Performance Criteria</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
<u>Base Operations (\$000)</u>			
<u>Operations of Utilities</u>	2,755	3,109	4,348
Total energy consumed (MBTU's)	59,149	59,717	61,651
Total non-energy consumed (000 Gals)	22,725	22,988	23,594
<u>Base Communications (\$000)</u>	3,195	3,635	4,395
Number of Instruments	4,437	4,558	4,959
Number of Mainlines	2,130	2,156	2,371
Daily Average Message Traffic	1,653	1,985	2,147
<u>Personnel Operations (\$000)</u>	108	124	3,518
Morale, Welfare and Rec (\$000)	108	124	3,518
Population Served, Total	5,600	5,600	99,600
(Military, E/S)	1,600	1,600	28,884
(Civilian/Dep, E/S)	4,000	4,000	70,716
<u>Base Operations - Mission</u>			
Other Base Services (\$000)			23,442
<u>Ownership Operations (\$000)</u>	1,903	1,634	3,979
Other Engineering Sup (\$000)	1,903	1,634	3,979

IV. Personnel Summary (End Strength)

Military E/S	12	12
Officer	1	1
Enlisted	11	11

DEPARTMENT OF THE NAVY  
OPERATION & MAINTENANCE, NAVY  
Exhibit OP-05

Activity Group: Ship Launched Weapons Rework and Maintenance  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Sea Systems Command

I. Description of Operations Financed

This activity group provides support for Navy weapons systems ashore and afloat. Various types of support include depot maintenance, tactical software maintenance, repair, and refurbishment of surface-to-surface missiles and missile launchers, guns, and small and large caliber conventional ammunition. The activity group also funds maintenance, repair, and calibration of mines and various types of nuclear weapons. Requirements for these programs may vary each year due to variables such as ship overhaul schedule, age of equipment, and newer, more complex equipment entering the Fleet.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Surface Warfare Systems						
Missile Sys Rework	16,647	19,102	19,381	23,096	22,847	-249
Med Range Msl Wpn Sys	5,983	4,801	4,781	8,345	11,100	2,755
Long Range Msl Wpn Sys	5,098	5,715	5,695	5,580	25,122	19,542
Gun Wpn Sys Ovhl & Spt	29,229	34,103	32,101	34,664	30,101	-4,563
Vertical Launch Sys	1,988	3,975	3,665	2,858	5,466	2,608
Mine Maintenance	4,245	4,196	4,186	4,165	3,533	-632
Self Def Surf Wpn Sys	1,520	4,922	4,922	3,750	4,084	334
CIWS Overhaul	0	0	0	0	23,628	23,628
Ammunition Systems						
Ammunition	9,357	3,322	4,312	7,579	4,813	-2,766
Nuc Wpn Spt	1,738	2,272	2,262	2,257	1,969	-288
TOT, SHP LNCHD WPN RWK/MNT	75,805	82,414	81,305	92,294	132,663	40,369

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

B. <u>Reconciliation of Increases and Decreases</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$92,294
2. Pricing Adjustments	4,480
A. Stock Fund (-8)	
1) Non-Fuel -R	
B. Industrial Fund Rates (2,763)	
C. Other Pricing (1,725)	
3. Functional Transfers 1,121	
A. Transfers-In (2,728)	
1) Inter-Appropriation a) <u>Missile Systems Rework</u> Funds transferred from Other Procurement, Navy for Depot Maintenance of SM-1 test equipment.	
B. Transfers-Out (-1,607)	
1) Inter-Appropriation a) <u>Medium Range MWS DM</u> Funds transferred to Operations and Maintenance, Navy Reserves for MK 92 Fire Control Antenna rework (-1,480) and tactical software maintenance (-127).	
4. Program Increases 61,645	
A. Other Program Growth in FY 1987 (61,645)	
1) SURFACE WARFARE SYSTEMS	
a) <u>Missile System Rework</u> 3,053	
Rework of 297 additional components for TERPIER BT and SM-2 missiles. Funding and unit increases are:	
TERPIER BT \$224 (14)	
SM-2 Electronics 2,829 (283)	
3,053 (297)	
b) <u>Medium Range Missile Weapons System</u> 4,004	
Realignment of software maintenance effort from Ship Systems Software Maintenance, Medium Range Missile Weapons System Software Maintenance (1,785) and 68 additional minor and intermediate computer program anomaly corrections (1,307). In addition to the functional transfer listed above to O&MN,R for rework of Combined Antenna Systems (CAS) and System Tracking and Illuminating Radar (STIR) on MK 92 Fire Control Antennas, there is real growth in Medium Range Missile Weapons System for rework of 1 CAS/STIR system (712). Increase also provides for completion of GMLS MK 11 rework on DDG-2 Class Destroyer initiated in FY 1986 (200).	

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

B. <u>Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
<p>c) <u>Long Range Missile Weapons Systems</u>            Will provide for additional rework of 9 AN/SPG-55B radars (17,240) and 4 MK 10 GMLS Loader Power Drives (329). Also, realignment of software maintenance effort from Long Range Missile Weapons Systems Software Maintenance (2,439) and 33 additional computer program anomaly corrections (553).</p>	20,561
<p>d) <u>Gun Weapon Systems Overhaul and Support</u>            Based on Fleet requirements and overhaul schedules, 5 additional 5"/54 gun weapon systems will require overhaul in FY 1987 (5,024); 1 MK 68 Director (350); 2 MK 16 computers (450); 4 MK 53 radars (856); and 3 MK 47 16 Stable Elements (160).</p>	6,840
<p>e) <u>Vertical Launch System</u>            Increased depot level and cannister refurbishment capability to support additional VLS equipped surface ships (1,256). Also, new start for submarine VLS special support equipment and fire control system (FCS) electronic equipment on SSN 688 Class Submarines (1,228).</p>	2,484
<p>f) <u>Self Defense Surface Weapon System</u>            Increase reflects increased support for 3 additional NATO Seasparrow Surface Missile System (NSSMS) Launchers.</p>	1,075
<p>g) <u>CIWS Overhaul</u>            Realignment of funding from Gun Weapon System Overhaul and Support to support depot establishment and overhaul of Close-In Weapon Systems (10,700). Increased funding will complete the in-house depot establishment (2,943) and overhaul 13 additional CIWS (9,685). Also, depot repair of 10 STINGERS is provided (300).</p>	23,628
5. Program Decreases	-26,877
A. Other Program Decreases in FY 1987	(-26,877)
<p>1) <u>Civilian Ceiling Waiver</u>            Savings attributable to more efficient and economical execution of workload experienced resulting from waiver of statutory end strength ceilings in FY 1985.</p>	-300

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

B. <u>Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
2) <u>SURFACE WARFARE SYSTEMS</u>	
a) <u>Missile System Rework</u> Rework of 817 fewer components for the SM-1 and SM-2 missiles. Funding and unit decreases are:	-6,956
SM-1 Electronics -4,015 (483)	
Ordnance -930 (123)	
Rocket Motor Regrain - 24 (6)	
SM-2 Ordnance -1,546 (181)	
Rocket Motor Regrain - 441 (24)	
-6,956	
b) <u>Long Range Missile Weapons Systems</u>	-1,175
Elimination of MK 5 Guided Missile Launcher System rework effort (-427), 4 fewer Mandatory Replacement Parts for the AN/SPG-55B (-585), and eight fewer MK 10 equipments (-163).	
c) <u>Gun Weapon Systems Overhaul and Support</u> 7 fewer 3"/50 gun systems will be overhauled (-1,650) as well as 3 fewer MK 56 Directors (-750). Funding for Close-In Weapon System depot establishment and depot overhaul has been realigned to Close-In Weapon System Overhaul (-10,700).	-13,100
d) <u>Mine Fleet DM</u>	-858
Decrease reflects 60 fewer test equipment repairs (-126); 11,786 fewer conversions, repairs, overhauls and modifications of mine components (-732).	
e) <u>Self Defense Surface Weapon System</u> Decrease reflects reduced overhaul support for 4 NSSMS Directors (-513); 7 fewer NSSMS Liquid Coolers (-297); 3 fewer low light level TVs (-81).	-891
3) <u>AMMUNITION</u>	
a) <u>Ammunition</u> Decrease reflects reduced funding for 382,419 fewer units of ammunition restoration.	-3,203
b) <u>Nuclear Weapons Support</u>	-394
Decrease of 41 units of rework and maintenance of special weapons at NAVSEA Activities (-264); 19 fewer units of rework and maintenance of special weapons at Fleet Activities (-130).	
6. FY 1987 President's Budget Request	\$132,663

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

III. Performance Criteria

A. SURFACE WARFARE SYSTEMS

1. Missile Systems Rework

The program provides factory level renovation and repair of missile airframe, electronics, ordnance and rocket motor propulsion. These repairs are required to correct in-service wear, damage, functional failure, and deteriorated sub-assemblies to maintain asset readiness at the CNO Objective. Electronics are contractor maintained items. Ordnance, rocket motors, and handling equipment are maintained at Naval Ordnance facilities.

	FY 1985		FY 1986		FY 1987	
	\$	Units*	\$	Units*	\$	Units*
Total Funding	16,647	2,291	23,096	2,718	22,847	2,213
=====						
TERRIER BT	1,015	21	300	21	538	35
SM-1	11,736	1,884	16,794	2,158	12,432	1,546
SM-2	2,728	341	4,834	494	5,875	572
UHF Telemetry	1,168	45	1,168	45	1,274	46
TARTAR/TERRIER	0	0	0	0	0	0
DEPOT TEST EQUIP	0	0	0	0	2,728	14

\* Units are the number of major components receiving depot maintenance.

Number of ships supported:

	FY 1985	FY 1986	FY 1987
Extended Range Msl			
Cmbnts	31	31	31
(CG,CGN,DDG)			
Medium Range			
Missile Combatants			
(CG,CGN,DDG,FFG)	85	95	94
Mobile Logistics			
Force (AOE,AE,			
AOR,AO)	27	27	27

Rocket motor regrain is required to ensure proper burn time and maintain the accuracy of the missiles. Component cost breakout:

Missile	Components	FY 1985		FY 1986		FY 1987	
		\$	Units	\$	Units	\$	Units
STD MSL-1	Electronics	9,356	1,210	10,580	1,384	7,040	901
	Ordnance	2,380	674	2,925	510	2,126	387
	Rocket Motor						
	Regrain	-	-	3,289	264	3,266	258
		11,736	1,884	16,794	2,158	12,432	1,546

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

III. Performance Criteria (cont'd)

Missile	Components	FY 1985		FY 1986		FY 1987	
		\$	Units	\$	Units	\$	Units
STD MSL-2	Electronics	1,296	108	2,897	231	5,857	514
	Ordnance	1,432	233	1,496	239	18	58
	Rocket Motor	0	-	441	24	0	0
	Regrain						
		2,728	341	4,834	494	5,875	572

2. Medium Range Missile Weapons Systems

Provides direct repair and rework of TARTAR weapon systems and components. Guided Missile Launching Systems (GMLS) are reworked in all years. FY 1985 marks the start of a major program to rework MK 92 fire control antennas (Combined Antenna System (CAS) and System Tracking and Illuminating Radar (STIR)) for FFG 7 class ships. The LOMIX maintenance concept (less on-board maintenance) used on this class ship necessitates rework of these antennas every four years.

	FY 1985		FY 1986		FY 1987**	
	\$	Units	\$	Units	\$	Units
Total Funding	5,983	14	8,345	19	11,100	175
=====						
GMLS MK 11	2,355	2	2,300	2	2,500	2
SM-2 Directors & Radars (incl AN/SPG-51D & MK 73)	375	4	392	4	410	4
MK 92 Antennas						
STIR	1,480	4	2,378	6	2,146	5
CAS	1,773	4	3,275	7	2,952	6
Tactical Computer Program Mnt*					3,092	158

\* Realigned from Medium Range Software Maintenance in FY 1987 and the outyears.

\*\* In FY 1987, Naval Reserve Fleet support will be \$1,480 thousand for CAS/STIR rework and \$127 thousand for Tactical Computer Program Maintenance. This funding has been transferred to O&M,NR, Missile Weapons Systems Maintenance.

3. Long Range Missile Weapons Systems

Provides direct repair and refurbishment of TERRIER weapon systems, including MK 10 equipment, MK 5 launchers, weapon direction system equipment, mandatory replacement parts support, and Guided Missile Launcher System (GMLS) MK 10 Loader Power Drive. The New Threat Upgrade (to counter the Backfire bomber threat) requires a new radar and director turn-around program.



Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	5,098		5,580		25,122	
MK 5 GMLS	711	1.3	415	.7	-	-
AN/SPG-55B						
Director	1,532	1	-	-	-	-
Radar	-	-	1,970	1	19,267	10
Mandatory Replacement						
Parts	139	1	1,449	10	905	6
MK 10						
GMLS	1,750	6	520	6	864	10
Equip. Repair	687	26	718	33	575	25
Mandatory Replacement						
Parts	120	12	187	18	194	18
WDS/FLS Equip.						
Repair	159	28	321	44	325	44
Tactical Computer						
Software Maint.*	-	-	-	-	2,992	134

\* Realigned from Long Range Software Maintenance in FY 1987 and the outyears.

4. Gun Weapons System Overhaul & Support

The program supports gun weapon system replacement overhaul and other gun improvement programs, including repair of modules and entire equipments of the Close-in Weapon System (CIWS), antenna scanner overhaul, and development of in-house capability to overhaul both CIWS modules and MK86 GFCS modules of varying complexity. In FY 1987 funding to support CIWS and the depot establishment has been transferred to CIWS Overhaul. The workyears for CIWS depot establishment reflect the in-house workyears only. The costs include installation and other support costs which differ for each year.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	29,229		34,664		30,101	
Gun Wpn Sys.	16,926	30	14,003	34	19,005	39
Replacement						
MK 86 Ovhl	3,403	5	5,553	8	6,295	8
& Upgrade						
CIWS Ovhl	1,436	5*	4,840	8		
& Storage						
CIWS Depot	3,046	32.3WY	5,744	34WY		
Establishment						
Other Depot	4,418	236	4,524	237	4,801	236
Maintenance/No.						
of major equip-						
ments						

\* In FY 1985, limited repair done on each of 3 systems, full overhaul of 2 systems. In FY 1986 8 systems will be fully overhauled.

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

III. Performance Criteria (cont'd)

5. Vertical Launch System

This program provides for planning, preparation, implementation and support of depot level maintenance for the Vertical Launching System (VLS). Two distinct types of VLS related depots have been established. One type, the interim Depot Level Maintenance Facility (DLMF) overhauls failed repair parts and higher assemblies. The second type inspects/tests canisters prior to initial loadout and overhauls and refurbishes fired missile canisters returned from the fleet. The DLMF is located at the prime contractor (Martin Marietta, Baltimore, MD), which was established in FY 1984, and the canister depot facilities at Naval Weapons Stations Seal Beach, Yorktown and Charleston. Canister depot facilities will be completed at Seal Beach in FY 1985, Yorktown in FY 1986 and Charleston in FY 1987. The submarine VLS is a new start and is a direct result of the installation of VLS on all SSN 688 Class Submarines. This program provides for the maintenance of VLS Special Support equipment (SSE) and VLS Fire Control System (FCS) electronic equipment on SSN 688 Class Submarines.

	FY 1985	FY 1986	FY 1987
	\$ Units	\$ Units	\$ Units
Total Funding	1,988	2,858	5,466
=====			
A. <u>Surface VLS</u>	1,988	2,858	4,238
DLMF repair,			
Canister repair,			
inspect & issue	343	1,412	2,814
Tech doc			
& repair plans	604	915	960
Depot			
Establishment	1,041	531	464
Canisters			
repaired	7	44	85
or tested			
B. <u>Submarine VLS</u>	-	-	1,228
VLS FCS Elect	-	-	932
Equip. Maint			
VLS Spec Supp			
Equip Maint	-	-	296

6. Mine Depot Maintenance

Provides support for depot level maintenance of mines and destructor systems. Includes conversion, overhaul, modification, repair and inspection of mine and destructor components and test equipment. (Units are number of mine components and test sets, respectively, that are reworked.)

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	4,245	65,280	4,165	61,771	3,533	49,925
=====						
Mine Components	3,565	64,871	3,499	61,386	2,954	49,600
Test Equipment	680	409	666	385	579	325

7. Self Defense Surface Weapon System Depot Maintenance

Provides the funding necessary for Depot overhaul of Select Sub-Systems of the NATO SEASPARROW Surface Missile System (NSSMS) and the Target Acquisition System (TAS). Demonstrated experience with the Self Defense Surface Weapon Systems installed on carriers, frigates, destroyers, auxiliaries and amphibious ships has shown the need for major refurbishment of certain equipments on a periodic basis. This refurbishment program is limited to those equipments which are susceptible to excessive wear and severe degradation due to harsh environments. Operation of this program emphasizes the equipment's inspection, repair, refurbishment and testing.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	1,520		3,750		4,084	
=====						
NSSMS GMLS			668	2	1,770	5
NSSMS Director	1,060	8	1,820	14	1,380	10
NSSMS Liquid						
Cooler	320	8	588	14	315	7
NSSMS	140	4	300	10	224	7
Low Light						
Level TV (LLLTV)						
TAS Antenna			374	1	395	1

8. CLOSE-IN WEAPONS Systems Depot Maintenance

Provides for the depot overhaul and repair of PHALANX Close-In Weapon Systems (CIWS), depot establishment and validation, and depot-related engineering support. Prior to FY 1987, funding for these efforts is included in the Gun Weapon System Overhaul Sub-activity group. By FY 1987, 437 systems will be in fleet service. System overhauls are planned at 5-year intervals.

In FY 1987, funding is also provided for repair requirements to support the Stinger missile systems which will be in the fleet.

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1985</u> \$ Units	<u>FY 1986</u> \$ Units	<u>FY 1987</u> \$ Units
Total Funding			23,628
=====			
a. Depot Establishment (WYs)		8,826	57.4
Depot Development		(3,419)	
Software Development and Maintenance		(4,609)	
Validation		(798)	
b. CIWS Overhauls		14,502	26
c. Stinger Repair		300	10

C. AMMUNITION SYSTEMS

1. Ammunition

Provides all depot maintenance actions to retain ammunition in a serviceable condition and to restore unserviceable ammunition. Classes maintained include: major and minor calibers of gun ammunition (including 16" shells), small arms and landing force ammunition, pyrotechnics and chemical ammunition, demolition explosives and Marine Corps ammunition in the custody of the Navy.

	<u>FY 1985</u> \$	<u>FY 1986</u> \$	<u>FY 1987</u> \$
Total Funding	9,357	7,579	4,813
=====			

Units			
Renovated*	2,161,000	1,047,850	665,431

\* Unit cost varies from year to year due to the mix of ammunition repaired. In FY 1985 a substantial amount of small caliber ammunition was programmed for renovation.

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

III. Performance Criteria (cont'd)

2. Nuclear Weapons Support

Provides assembly, rework, modernization, repair, maintenance, calibration, limited life component exchange and related operations for Anti-Submarine Warfare (ASW), TOMAHAWK and ground-delivered nuclear weapons.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	1,738	389	2,257	482	1,969	422
=====						
NAVSEA Activities						
Rework & Maint. (units)*	1,103	251	1,352	290	1,157	249
Fleet Activities						
Rework & Maint. (units)*	607	138	874	192	782	173
War Reserve & Trainer Spt.	28		31		30	
Ready for Issue Status (%)		79		80		70

\* Units = Numbers of limited life component exchanges.

IV. Personnel Summary (End Strength) N/A

Department of the Navy  
Operations & Maintenance, Navy  
Exhibit OP-05

Activity Group: ASW Maintenance  
Budget Activity: 7 - Central Supply & Maintenance  
Claimant: Naval Sea Systems Command

I. Description of Operations Financed

The purpose of the ASW Maintenance program is to provide for the rework and maintenance of surface ship and submarine ASW weapon systems. Systems include ASW targets, underwater fire control systems, torpedoes, torpedo tubes, the surface ship Anti-Submarine Launched Rockets (ASROC) and launchers, Submarine Launched Rocket (SUBROC), and the Encapsulated Torpedo (CAPTOR) mines. Also included are rework for components of the above equipments together with certain related items such as ASROC motor rework and container refurbishment.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appro- priation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Submarine ASW Maintenance						
Sub ASW Maintenance	74,668	70,620	69,305	74,296	82,470	8,174
Surface ASW Maintenance						
Surface ASW Maint	59,687	60,964	63,651	72,066	77,336	5,270
Aviation ASW Maintenance						
Aviation ASW Maint	18,769	24,513	24,431	23,930	21,182	-2,748
NSSP Maintenance						
NSSP Maintenance	<u>1,261</u>	<u>4,145</u>	<u>4,127</u>	<u>3,279</u>	<u>3,668</u>	<u>389</u>
TOTAL, ASW SYS MAINT	154,385	160,242	161,514	173,571	184,656	11,085

Activity Group: ASW Maintenance (Cont'd)

<u>B. Reconciliation of Increases and Decreases</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$173,571
2. Pricing Adjustments	8,267
A. Industrial Fund Rates	(5,951)
B. Other Pricing	(2,316)
3. Functional Transfers	-1,572
A. Transfers-Out	(-1,572)
1) Intra-Appropriation	
a) SUBMARINE ASW MAINTENANCE	-1,572
Transfer of remaining funds for	
administrative costs at IMA,	
YORKTOWN and IMA, CHARLESTON	
to the Fleet.	
4. Program Increases	15,622
A. Other Increases	(15,622)
1) SUBMARINE ASW MAINTENANCE	
a) MK 48 Depot	11,355
IMA - Funds 177 additional	
MK 48 IMA turnarounds (4,002),	
WDM - Funds 178 additional	
MK48 WDM turnarounds (4,699),	
Other - Funds additional MK 48	
turnarounds (2,654).	
2) SURFACE SHIP MAINTENANCE	
a) CAPTOR	759
Increases depot actions by 116	
and IMA turnarounds by 153 in	
FY 1987.	
b) FCS	1,820
Additional AN/SQQ-89 systems	
computers will be overhauled to	
incorporate a central system	
(545), and one additional MK 53	
and one MK 38 FC attack Console	
(1,275) will be refurbished.	
c) Vertical Launch ASROC (VLA) Missile	340
FY 1987 new start. Funds will provide	
depot and intermediate maintenance	
for the overhaul and repair of VLA	
shipping containers.	
d) MK 46	982
77 additional DM turnarounds will be	
performed in FY 1987 (886), and 88	
additional IMA turnarounds will be	
performed in FY 1987 (96).	

Activity Group: ASW Maintenance (Cont'd)

P. <u>Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
3) <u>NSSP COMPUTER PROGRAM</u> By FY 1987, 419 standard signal processors will be deployed in 20 platforms an increase of 81 systems above FY 1986. In addition, the AN/UYS-2 will be introduced in FY 1987. This funding will provide maintenance of an additional 2,108 computer programs, 65 documents, and maintenance for the additional 81 processors.	366
5. Program Decreases	-11,232
A. Other Decreases	(-11,232)
1) <u>CIVILIAN CEILING WAIVER</u> Savings attributable to more efficient and economical execution of workload experienced resulting from waiver of statutory and strength ceilings in FY 1985.	-707
2) <u>SUBMARINE ASW MAINTENANCE</u> a) <u>SENSORS</u> Decrease in repair and installation of 2F Cog Electronic components.	-4,504
3) <u>SURFACE ASW MAINTENANCE</u> a) <u>MK 46 Torpedo</u> Will result in decreases in items such as 4T Cog and MK 1030 warhead refurbishment.	-2,127
b) <u>ASROC Launchers</u>	-90
4) <u>AVIATION MAINTENANCE</u> a) <u>Targets</u> 246 fewer target runs will be conducted in FY 1987.	-2,806
b) <u>Pingers</u> 774 fewer pingers will be repaired in FY 1987.	-854
c) <u>CV Module</u> Reduction in physical upgrading in FY 1987.	-144
6. FY 1987 President's Budget Request	\$184,656



Activity Group: ASW Maintenance (Cont'd)

III. Performance Criteria

1. SUBMARINE ASW MAINTENANCE

This program provides for the rework and maintenance of submarine ASW weapon systems. Systems include torpedoes, torpedo tubes, SUBROC, sensors and underwater fire control systems. Also included are rework for components of the above equipments and maintenance of software supporting the equipment.

Unless included below units would be reflected as various, comprised of items and workyears and/or items of varying mix which may not lend themselves to average pricing from one year to the next due to changes in the mix of the workload. Additional backup data will be provided upon request.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	74,668		74,296		82,470	
=====						
1. Torp DM						
a. MK 37	408		412		409	
b. MK 48						
Other	27,092		19,583		23,221	
IMA	17,439	1,841	19,128	1,986	22,641	2,163
WDM	7,284	240	6,831	228	12,191	406
2. UW FCS DM	4,569		5,665		5,430	
3. SUBROC DM	7,145		6,554		6,330	
Platforms		45		34		31
Missile/Test						
Components		2,831		2,596		2,390
4. Sensor DM	10,731		16,123		12,248	

2. SURFACE ASW MAINTENANCE

Provides for the rework and maintenance of surface ship ASW underwater fire control systems, sensors, torpedoes, torpedo tubes, CAPTOR, ASROC and launchers. Also included are rework for components of the above equipments and maintenance of software supporting the equipment.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	59,687		72,066		77,336	
=====						
1. Torpedos						
a. MK 46 DM	13,354	1,250	21,928	1,969	23,692	2,046
IMA	8,938	2,949	10,708	3,384	11,328	3,472
OTHER	6,779		9,731		8,346	
b. Torp Tube						
Rwk & Test	430	10	456	10	563	12

Activity Group: ASW Maintenance (cont'd)

III. Performance Criteria (Cont'd)

		FY 1985		FY 1986		FY 1987
	\$	Units		\$	Units	\$
2. U/W FCS	4,250		1,251		2,576	
a. MK 53		6		3		4
b. MK 38		3		0		1
c. ASWCS	0		688		1,261	
3. ASROC DM	15,830	18	14,648	16	15,035	16
4. Sensors	5,930		7,284		7,849	
5. CAPTOR	4,176		5,372		6,346	
6. VLA	0		0		340	

3. AVIATION MAINTENANCE

The Aviation Maintenance Program provides targets and pingers required for training exercises for all equipment including Torpedo MK 48, sonars, sonobuoys, and Magnetic Anomaly Detection (MAD) equipped aircraft. The program provides depot level repair for the overhaul and maintenance of target end items/sub-assemblies beyond the capability of the Intermediate Maintenance Activities (IMAs). Also provides services for fleet torpedo firings required for ASW fleet exercises, including maintenance and turnaround of range pinger systems. Includes depot maintenance of CV-ASW Module.

		FY 1985		FY 1986		FY 1987
	\$	Units		\$	Units	\$
Total Funding	18,769		23,930		21,182	
=====						
1. Targets	15,200	1,502	17,573	1,596	15,470	1,350
(# of runs)						
2. Pingers	3,471	3,227	4,719	4,119	4,054	3,345
3. CV/ASW Mod1	98		1,638		1,658	

4. NAVY STANDARD SIGNAL PROCESSOR (NSSP) COMPUTER PROGRAM MAINTENANCE

Provides computer program maintenance and support of all NSSP commodities including AN/UYS-1 Advanced Signal Processor (ASP), AN/UYS-2 Enhanced Module Signal Processor (EMSP), applicable programming methodologies, computer programming environments, associated documentation and other NSSP configuration items. Included is the establishment of an in-house Computer Program Support Activity. This program includes evaluation of Engineering Change Proposals, analysis of operational and maintenance data, maintenance and upgrade of computer programs and documentation and associated services necessary to support NSSP commodities. AN/UYS-1 products are being used in 16 platforms and weapons systems, ground applications and Trainers. Deliveries of the AN/UYS-2 begin in FY 1987. The significant improvement in performance of the AN/UYS-2 permits its use in a wider array of applications than the AN/UYS-1.

Activity Group: ASW Maintenance (cont'd)

III. Performance Criteria (Cont'd)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Total Funding	\$1,261	\$3,279	\$3,668

=====

Program Management	\$240	\$502	\$561
CP Mtce & Eng. Support (Subprograms Maintained)	\$505	\$1,442 (2,522)	\$1,744 (4,630)
CP Tech Documentation (Documents Maintained)	\$246	\$658 (164)	\$656 (229)
Maintenance of Deployed Systems (Platforms/Systems)	\$270	\$677 (16/338)	\$707 (20/419)

IV. PERSONNEL SUMMARY (End Strength) N/A

DEPARTMENT OF THE NAVY  
OPERATION & MAINTENANCE, NAVY  
Exhibit OP-05

Activity Group: Other Ship Systems Maintenance  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Sea Systems Command

I. Description of Operations Financed

Other Ship System Maintenance activity group funds the depot overhaul and maintenance of: shipboard electronic and HM&E equipment; calibration, salvage and underwater ship repair equipment; small arms; and shipboard computer programs. Requirements for these programs are not constant each year but vary according to factors such as ship overhaul schedules, age of equipment, and new, more complex equipment entering the Fleet.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Surface Warfare Systems						
Search Radar Maint	16,963	26,364	23,774	20,212	24,054	3,842
Coast Guard Support	7,743	8,578	8,520	8,103	8,608	505
Small Arms Repair	1,770	1,909	1,899	1,895	1,696	-199
Surface Mine						
Counter-Measures	1,556	1,732	1,703	1,522	0	-1,522
INSPWAR	2,188	4,152	3,642	3,633	5,081	1,448
Electronic Systems						
TMDE/METCAL	11,201	12,538	12,498	11,469	10,695	-774
2F Cog Electronics	22,820	23,137	22,001	25,629	39,444	13,815
Undersea Warfare Systems						
2F Cog Electronics USW	28,250	35,496	33,067	25,624	20,267	-5,357
Pollution Abatement Equip Maint						
Pollutn Abate Eqp Maint	506	579	579	579	607	28
Diving & Salvage						
Salvage Epuip Maint	7,820	8,387	8,226	8,186	8,328	142
Undrwrtr Ship Husbandry	683	655	665	825	482	-343
Surface Ship Support						
2S Cog Material H,M&E	31,906	41,866	37,179	37,486	36,567	-919
Major Ship/Boat Repair Program						
Boat Rehab	812	1,021	1,021	1,326	1,380	54
LCM/LCU Rehab & Mod	0	0	0	0	6,289	6,289
Inactive Ship Depot Maint						
Inactive Ship Maint	1,007	75,422	422	0	0	0
CG 47/DDG 51 Wpn Sys DM						
CG 47/DDG 51 Wpn Sys Mnt	7,095	11,093	10,667	9,931	31,618	21,687
Ship System Software Maintenance						
Ship Sys Software Maint	46,228	54,393	52,604	57,593	41,893	-15,700
TOT, OTHER SHIP SYS MAINT	188,548	307,322	218,467	214,013	237,009	22,996

70111

Activity Group: Other Ship Systems Maintenance (cont'd)

B. <u>Reconciliation of Increases and Decreases</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$214,013
2. Pricing Adjustments	5,099
A. Stock Fund (36) 1) Non-Fuel 36 B. Industrial Fund Rates (627) C. Average Grade Reduction (-30) D. Annualization of Civilian Health Benefits (-22) E. Other Pricing (4,488)	
3. Functional Transfers	-3,575
A. Transfers-Out (-3,575) 1) Inter-Appropriation a) <u>SURFACE WARFARE SYSTEMS</u> i) <u>Search Radar Maintenance</u> -588 Funding for Reserve fleet search radar major components transferred to O&M,NR Search Radar Maintenance. ii) <u>Surface Mine Countermeasures</u> -2,987 Funding for Surface Mine Countermeasures transfers to O&M,NR Sonar Overhaul.	
4. Program Increases	58,458
A. Other Program Growth in FY 1987 (58,458) 1) <u>SURFACE WARFARE SYSTEMS</u> a) <u>Search Radar</u> 4,394 Increase will fund restoration of 1 major 3D component AN/SPS-39A (1,765); 16 additional 2D components will be repaired (2,437); and seven additional submarine radars will be restored (192). b) <u>Coast Guard Support</u> 201 Two additional gun mounts, 1 3"/50 and 1 MK 75, as well as 8 sonar components will be overhauled to meet Coast Guard Fleet readiness requirements. c) <u>Surface Mine Countermeasures</u> 1,412 Included in the functional transfer of support for mine countermeasures to Operation and Maintenance, Navy Reserves is an increase in funding for the increasingly complex Mine Countermeasure systems being introduced into the Fleet. In FY 1987, 10 more hunting systems, 12 more neutralization systems, and 12 more navigation systems will be in-service replacing older, obsolete equipments.	

Activity Group: Other Ship Systems Maintenance (cont'd)

B. <u>Reconciliation of Increases and Decreases</u>	<u>Amount</u>
d) <u>INSPWAR</u> Funding will support maintenance of one additional Dry Deck Shelter (1,056); hand-held sonars (23), 28 additional MK 15 Life Support System conversions (278).	1,357
2) <u>ELECTRONIC SYSTEMS</u>	
a) <u>TMDE/METCAL</u> Increase reflects additional support for 3,400 Standards Calibration (803); increased support for 2 additional Gas Turbine Ships (484).	1,287
b) <u>2F Cog Electronics</u> Five additional NTDS Ship suites will be refurbished to extend their useful life by 10 years (10,522). In addition, the baseline cost of the 9 suites in FY 1987 is higher than the baseline cost of the 9 suites in FY 1986 (3,176) due to differences in the size and number of components in NTDS suites. 26 additional AN/WSN 2/5 Inertial Navigation Systems repaired (2,175).	15,873
c) <u>2F Cog Electronics - USW</u> 46 additional SSN sonar equipments will be repaired commercially.	1,294
3) <u>POLLUTION ABATEMENT</u>	
a) <u>Pollution Abatement</u>	5
4) <u>DIVING &amp; SALVAGE</u>	
a) <u>Salvage Equipment</u> Increase reflects complex overhaul of Deep Drone Submersible.	142
b) <u>Underwater Ship Husbandry</u> Increase of 1.5 equipment modifications performed.	318
5) <u>SURFACE SHIP SUPPORT</u>	
a) <u>2S Cog Material HM&amp;E</u> Increase will fund depot maintenance on 7 additional diesel engines (700); 3 additional bow domes (474); 13 additional propellers (1,200); other HM&E equipment (400).	2,774
6) <u>MAJOR SHIP/BOAT REPAIR PROGRAM</u>	
a) <u>Boat Rehabilitation</u> Increase funds additional rehabilitations and issues.	44
b) <u>LCM/LCU/LCAC Rehab and Mod</u> New program to provide life cycle support for 12 LCAC's (4,084) and new program to fund rehabilitation and modernization of LCM/LCU landing craft (2,219).	6,303

Activity Group: Other Ship Systems Maintenance (cont'd)

B. Reconciliation of Increases and Decreases (Cont'd) Amount

- 7) CG 47/DDG 51 WEAPON SYSTEM
  - a) Aegis Combat System Maintenance 21,269  
 Realignment of AEGIS combat system computer program maintenance to AEGIS combat system maintenance (11,308). In addition, 3 newly delivered cruisers will generate: computer program deliveries (1,476), additional computer program problem resolutions (3,849), increased electronic components & power tubes repaired (3,957), new start of computer program technical assists (679).
- 8) SHIP SYSTEM SOFTWARE MAINTENANCE
  - a) Ship System Software Maintenance 1,785  
 FCDSSA: Additional funding for salaries provided due to an increased level of effort (94). The Fleet Direction Combat Systems Software Activities operating expenses increase to provide a link system for improved test capability for the certification of NTDS programs and to move into larger buildings in order to accommodate increased software maintenance requirements (1,520). Sonar Systems: Increased LAMPS System Software Maintenance and Support (171).

5. Program Decreases -36,986

- B. Other Program Decreases (-36,986)
  - 1) Civilian Ceiling Waiver -1,164  
 Savings attributable to more efficient and economical execution of workload experienced resulting from waiver of statutory end strength ceilings in FY 1985.
  - 2) SURFACE WARFARE SYSTEMS
    - a) Search Radar -67  
 Sixteen fewer repeaters and switchboards will receive maintenance (-67).
    - b) Small Arms Repair -301  
 2,223 fewer service weapons and 142 fewer marksmanship weapons will be repaired.
  - 3) ELECTRONIC SYSTEMS
    - a) TMDE/METCAL -2,242  
 Decrease of 17,600 Fleet calibrations.
    - b) 2F Cog Electronics  
 61 fewer SINS MK 3 and MK 2 measuring units will be maintained (-1,418).  
 The mix of other navigation and

Activity Group: Other Ship Systems Maintenance (cont'd)

B. Reconciliation of Increases and Decreases (Cont'd)

Amount

- communications equipments in FY 1987 requires less funding than in FY 1986 (-253). As the CP-642 is replaced by AN/UYK computers, fewer components and memory units are planned for depot repair in FY 1987 (-738).
- 4) UNDERSEA WARFARE SYSTEMS
- a) 2F Cog Electronics USW -5,718
- 4,231 fewer transducer and hydrophones for SSBN/SSN/ASW/AAW ships repaired (-5,377); 6 fewer SSBN periscope repaired (-250); 12 fewer SSBN Sonar Equipments repaired (-485); 25 fewer SSN sonar equipments repaired in-house (-900).
- 5) DIVING & SALVAGE
- a) Salvage Equipment -298
- Decrease reflects simpler repairs of equipment.
- b) Underwater Ship Husbandry -680
- Decrease of four techniques/procedures developed (-629); reduction of one manual chapter update (-51).
- 6) SURFACE SHIP SUPPORT
- a) 2S Cog Material-HM&E -3,500
- Depot maintenance will not be performed on 16 marine gas turbines.
- 7) SHIP SYSTEMS SOFTWARE MAINTENANCE
- a) Ship Systems Software -19,313
- FCDSSA - Decreased support currently planned for tactical intelligence systems and communications system (-920).
- Tactical Embedded Computer: - Decrease reflects reduced funding to accomplish in-service engineering for AN/UYK-43/44 computers, peripherals and displays (-934) and software maintenance to fleet computers (-677).
- Sonar System Software: - Decreased support for SH-60/B software maintenance (-675); and AN/SQQ-28 software maintenance (-575).
- Long Range MWS: - Effort is realigned to Long Range Missile Weapons Systems Depot Maintenance (-2,439).
- Medium Range MWS: - Effort is realigned to Medium Range Missile Weapons Systems Depot Maintenance (-1,785).
- AEGIS: - Effort is realigned to CG-47/DDG-51 Wpn System Depot Maintenance (-11,308).

6. FY 1987 President's Budget Request

\$237,009



Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria

A. SURFACE WARFARE SYSTEMS

1. Search Radar Depot Maintenance

Provides depot maintenance of all Fleet search radar major components (2F Cog equipment) as well as maintenance of Navy-owned radars in Coast Guard vessels.

The 2F Cog restoration program provides major maintenance and repair of search radar equipment in support of Fleet operations. Equipment is removed from ships as necessary and shipped to the appropriate repair facility for restoration. Requirements are based on replacement commitments to specific ships during ROH/RAV periods and/or time usage factors. Restored material provides equipment for approximately twenty-five percent of the cost of new procurement. Restoration cost per equipment varies greatly -- from approximately \$20,000 to \$2,000,000, depending on the type of equipment being restored. Coast Guard Support provides maintenance of Navy-owned search radar equipment on high and medium endurance Coast Guard cutters as required by Public Law 207. This allows for the ready consolidation of Coast Guard vessels with the Navy in time of a national emergency.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	16,963		20,212		24,054	
=====						
1. 2F Cog Restoration	15,663	454	18,252	424	22,779	432
3D Radar	3,712	30	6,212	38	7,977	39
2D Radar	8,279	244	8,366	220	11,003	236
Submarine Radar	230	6	258	9	450	16
Repeaters & Switchboards	3,442	174	3,416	157	3,349	141
2. Coast Guard Support	1,300	38	1,460	38	1,275	38
3. Naval Reserve Radars	-	-	\$500	10	*	

\* This funding will be transferred to O&M,NR (\$588 thousand) in FY 1987.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

2. Coast Guard Support - Depot Maintenance

Provides for the maintenance and overhaul support of Navy-owned weapons and ASW systems installed in U.S. Coast Guard ships. Gun, Fire Control, and Sonar Systems will be installed on 7 Medium Endurance Cutters (WMEC) and 12 High Endurance Cutters (WHEC) in FY 1987, an increase of 2 ships over FY 1986.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Number of Systems Rehabilitated		105		108		118
Total Funding	7,743		8,103		8,608	
=====						
1. Gun Sys Rehab & Mat'l Spt.	3,400	11	4,467	14	4,512	16
2. Sonar Maint/Ovhl	3,082	91	3,308	94	3,768	102
3. MK 92 O/A Inst.	980	3	0			
4. Depot Spt	281	-	328		328	

3. SMALL ARMS REPAIR

The program provides for total Navy intermediate and depot level maintenance for all Navy-owned weapons .50 caliber and below. Repair dollars are used to provide for allowance items for small arms to meet critical allowance needs. Many of the repaired items will be utilized by forward site reserve units and Construction Battalions which require heavy small arms support and usage in the event of mobilization.

	FY 1985	FY 1986	FY 1987
Total Funding	\$1,770	\$1,895	\$1,696
=====			
No. of Serv Wpns Repaired	6,052	7,081	4,858
No. of Mark. Wpns Repaired	778	743	601

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

4. Surface Mine Countermeasures Maintenance\*

Supports maintenance for in-service mine countermeasures materials, equipment, and systems. Provides for: (a) maintenance of systems and components, including screening, testing, adjustment, and replacement; and (b) conversion, overhaul, modification and repair of components and test equipment to maintain the cyclic maintenance process. This program funds MSOs and MSHs which are Mine Countermeasure ships within the Naval Reserves. Therefore, the program transfers to the Reserves in FY 1987.

	FY 1985		FY 1986		FY 1987
	\$	Units	\$	Units	\$ Units
Total	1,556		1,522		*
Mine Hunting Systems	539	25	635	30	*
Mine Neutralization Systems	594	12	560	10	*
Mine Sweeping Systems	325	215	221	190	*
Mine Navigation Systems	98	7	106	9	*

Units = Numbers of systems supported.

\* Entire program transfers to O&M,NR; Sonar Overhaul (\$2,987 thousand) in FY 1987.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

5. Inshore Special Warfare Equipment Depot Maintenance

Provides funds for the inspection, testing, repair, and alteration of Swimmer Delivery Vehicles (SDV) and Dry Deck Shelters (DDS), Underwater Breathing Apparatus, Equipment Shelters, other equipment and installation of communication equipment.

	FY 1985 \$ Units	FY 1986 \$ Units	FY 1987 \$ Units
Total Funding (\$000)	2,188	3,633	5,081

Efforts funded:

1. Maint of SDV's (No. of Vehicles Overhauled)	908	-	2,100	7	2,100	7
2. Maint of DDS's (No. of Shelters) Operational Cycles	500	1	1,283	2	2,405	3
Number of Submarines Configured		1		5		9
				3		4
3. Breathing Apparatus No. of MK 15 Conversions	-		250		553	
				25		53
4. MIL VAN Equip Inst	780	1		-		-
5. Handheld Sonar		-		-	23	5

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

B. ELECTRONIC SYSTEMS

1. Test, Measurement and Diagnostic Equipment/Metrology Calibration (TMDE/METCAL)

Identifies electronic test equipment requirements for monitoring and maintaining the performance level of systems/equipments and establishes calibration support required to maintain mechanical and ordnance TMDE. TMDE is any device which measures, calibrates, gages, tests, inspects, monitors, diagnoses or otherwise examines the operating or physical characteristics of a system/equipment or materials/supplies. Depot maintenance supports (1) calibration of all mechanical and ordnance calibration standards; (2) calibration of fleet mechanical and ordnance TMDE (including gas turbine ship support) which is beyond the capability/capacity of fleet calibration activities; and (3) maintenance of interface gages and master tooling for the interchangeability of components and assemblies of weapon systems.

FY 1985 Units

=====

<u>W/Y</u>	<u>Calibration*</u>	<u>No. of Ships</u>	<u>(\$)</u>
Fleet Calibration Overflow	34,700		4,146
Gas Turbine Ship Support		64	4,205
Standards Calibration	10,900		2,182
Special Interface Gage Prog	7		668
Total Financed Program			11,201

FY 1986 Units

=====

<u>W/Y</u>	<u>Calibration*</u>	<u>No. of Ships</u>	<u>(\$)</u>
Fleet Calibration Overflow	30,200		3,927
Gas Turbine Ship Support		88	3,493
Standards Calibration	16,000		3,349
Special Interface Gage Prog	9		700
Total Financed Program			11,469

FY 1987 Units

=====

<u>W/Y</u>	<u>Calibration</u>	<u>No. of Ships</u>	<u>(\$)</u>
Fleet Calibration Overflow	12,600		1,764
Gas Turbine Ship Support		90	3,932
Standards Calibration	19,400		4,299
Special Interface Gage Program	9		700
Total Financed Program			10,695

\* Calibration is not a uniform workload standard. A calibration may take from .25 workhours to over 80 workhours. Therefore, there does not exist a direct relationship between dollars and calibration.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

2. 2F Cog Electronics

This program provides for refurbishment and restoration of the Navy Tactical Data System (NTDS) components and suites and inertial navigation and stabilized gyrocompass systems on surface combatants and depth detectors on SSNs and SSBNs.

	FY 1985 \$ Units	FY 1986 \$ Units	FY 1987 \$ Units
Total	22,820	25,629	39,444

=====

a. Navigation - Maintains operational readiness of inertial navigation and stabilized gyrocompass systems on board surface combatants and submarines and depth detectors on SSNs and SSBNs. Requirements are based on demand history and projected increases in fleet population. Costs to restore navigation equipment range from \$5 thousand for underwater log components to \$250 thousand for AN/WSN-1 inertial navigation systems.

Inertial						
Measuring Units	2,795	61	6,150	129	8,455	155
SINS MK-3	5,646	303	4,178	229	2,876	175
SINS MK-2	415	19	298	17	211	10
Other Nav. &						
Inter. Com.	2,655	74	834	25	605	48
Subtotal	\$11,511	457	\$11,460	400	\$12,147	388

b. NTDS - Supports requirement to extend useful lifetime of ten year old equipment by an additional ten to fifteen years. Requirements are dictated by NTDS equipped ships scheduled for overhaul and the age of their installed systems. Since an average NTDS Suite includes 110 components, refurbishment of particular suites vary greatly in cost complexity. The NTDS units provided reflect the number of suites being refurbished; their individual refurbishment cost will vary between \$300K and \$2.3M.

Ship Suites	9,962	6	12,669	9	26,735	14
Memory Units/						
Components	1,347	183	1,500	211	562	110
Subtotal	\$11,309	189	\$14,169	220	\$27,297	124

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

C. UNDERSEA WARFARE SYSTEMS

1. 2F Cog Electronics USW

The program supports repair/restoration of 2F Cog Undersea Warfare Equipment such as sonar systems towed arrays, depth sounders, acoustic countermeasures, periscopes, and undersea communication systems installed or to be installed in attack submarines, ballistic missile submarines, major surface combatants, and support ships. Restoration repair is performed at Naval Shipyard transducer repair facilities, NAVSEA field activities, and by various contractors.

Program requirements are based on quantities of installed equipment, the age of equipment, the cycle time required to repair items, the position of the installed equipment on the ship, issue rates of equipment to the fleet and emergent fleet problems.

Transducers, hydrophones, scanning switches and domes are major components of a sonar system.

- a. Transducers receive and send signals and are used on active systems.
- b. Hydrophones, used on passive systems, only receive signals.
- c. Scanning switches are electro-mechanical switches made primarily of silver, which are necessary for a sonar system to process audio and visual signals.
- d. Domes protect the electronics of sonar systems from physical damage.
- e. "Sonar equipment" designates various other components of sonar systems that are refurbished with program funds.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	28,250	9,562	25,624	13,714	20,267	9,347
=====						
SSBN						
Transducers &						
Hydrophones	443	346	613	471	444	341
Sonar Equipment						
(In House)	725	28	831	41	817	40
(Commercial)	691	33	477	12	0	0
Periscopes	328	9	540	15	330	9

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$ units		\$ units		\$ Units	
<u>SSN/ASW/AAW Ships</u>						
Transducers and						
Hydrophones	9,646	8,316	14,411	12,423	9,678	8,322
Scanning						
Switches	2,497	159	1,214	90	936	68
Domes	206	25	252	26	260	26
Sonar Equip*						
(In-House)	3,401	145	3,619	149	2,896	124
(Commercial)	8,534	116	896	32	2,231	78
Periscopes	1,041	17	1,883	30	2,033	32
<u>Support Ships</u>						
Transducers &						
Hydrophones	489	361	588	416	425	300
Comm Sonar						
Equipment	249	7	300	9	217	7

\*Unit costs vary due to a different mix of equipment overhauled each year.

Number of Ships

<u>Supported</u>			
(ROHs & SRAs)	159	137	148
SSBNS	4	2	2
SSNS	31	26	34
Surface			
Cmbnt (ASW & AAW)	98	81	81
Spt Ships	26	28	31

D. POLLUTION ABATEMENT EQUIPMENT DEPOT MAINTENANCE

This program overhauls, repairs, and maintains the Navy's entire inventory of open-sea pollution abatement equipment (skimmers, pumps, booms, boats, etc.), located at two continental United States Emergency Ship Salvage Material (ESSM) Bases.

	FY 1985		FY 1986		FY 1987	
	\$ Units		\$ Units		\$ Units	
Total Funding						
(\$000)	506		579		607	
=====						
1) Number of equip						
repairs	459	368	530	370	560	448
2) Number of equip						
pieces inventoried	47	750	49	750	47	750
CONUS Bases		2		2		2



Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

E. DIVING AND SALVAGE

1. Salvage Equipment Depot Maintenance

Program repairs, overhauls, and maintains eighty percent (80%) of the Navy salvage equipment inventory (winches, compressors, pumps, generators, welding machines, etc.) located at six Emergency Ship Salvage Material (ESSM) bases worldwide. Program also funds the repair, maintenance, and overhaul of the Navy's three unmanned submersible vehicles (DEEP DRONE, CURV III, and ORION) as well as two inactive heavy lift craft (YHLCs). These craft are utilized for ship and aircraft salvage, special search, and pollution abatement missions. In FY 1987 a major overhaul is planned for DEEP DRONE to increase availability.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	7,820		8,186		8,328	
=====						
<u>Operational</u> <u>ESSM Bases</u>	6,733	5	7,800	6	7,800	6
1) # Equip Repairs	3,500		3,504		3,580	
2) # Equip Pieces Inventoried	10,000		10,000		10,200	
<u>Ships, Craft,</u> <u>Unmanned</u> <u>Submersibles</u>	1,087		386		528	
1) # Vehicle repairs	22		17		1	
2) Craft Operational Availability*						
DEEP DRONE	50		35		100	
ORION	70		50		50	

\* Percent of Readiness/Capability.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

2. Underwater Ship Husbandry

Program provides for modifying existing tools to underwater usage, and developing techniques and procedures for the underwater accomplishment of routine hull maintenance. Program emphasis is on the development of underwater techniques that do not require drydock time and avoid associated costs, which may range from \$200 thousand (FF Class Ships) to \$500 thousand (CVNs). Actual work is performed on an emergent requirement basis as procedures, techniques, and tools are perfected.

Program provides for the updating of work and training manuals, and the conduct of training exercises for various fleet activities in new techniques and procedures.

procedures.						
	FY 1985		FY 1986		FY 1987	
	\$ Units		\$ Units		\$ Units	
<u>Total Funding</u>						
<u>(\$000)</u>	683		825		482	
=====						
1) Number of equipment modifications	120	1	-	-	318	1.5
2) Number of techniques and procedures developed	410	2	615	4	0	0
3) Number of manuals up-dated (by chapter)	153	2	210	2	164	1

F. SURFACE SHIP SUPPORT

2S Cog Material - HM&E

Refurbishes a wide variety of ship equipments such as gas turbine engines, propellers, shafts, sonar domes, main feed pumps, and generators for the operating fleet and for ship overhauls. The cost and time to refurbish is approximately one-third less than it would be to procure new equipment. Stocks maintained are based on fleet maintenance history, CASREPT demands and emergent overhaul requirements. Refurbishment can require a year and affect fleet operations significantly if an item is not in issuable condition when needed.

Units equate to pieces of equipment repaired. However, because of the vast differences in sizes, types, condition before repair and mix of equipments contained in each of the line items below, no meaningful comparisons can be derived by dividing costs by units.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	31,906	413	37,486	455	36,567	478
=====						
Hull Equipment	5,432	36	3,600	30	4,100	28
Propulsion						
Equipment	21,095	179	27,449	215	25,667	218
Auxiliary						
Equipment	4,174	54	5,087	43	5,300	50
Electrical						
Equipment	1,205	144	1,350	162	1,500	182
PROPELLERS	4,944	75	5,434	79	6,613	92
1. Submarine	1,300	20	1,534	23	1,600	24
2. Carrier	500	5	400	4	600	6
3. Surface Ship	3,144	50	3,500	52	4,413	62
MARINE GAS	14,451	74	17,334	86	13,780	70
TURBINES						
1. LM2500 Gas	8,638	20	10,800	27	9,600	23
Generator						
2. LM2500	3,018	10	3,568	15	1,500	6
Power Trb.						
3. Allison	2,245	23	2,400	27	2,100	24
501-K17						
Engine						
4. Other MGT	550	21	566	17	580	17
DIESEL ENGINES	500	5	1,700	17	2,400	24
(MSO)						
SHAFTS	1,200	25	2,981	33	2,874	32
1. Submarine	500	7	600	7	900	10
2. Carrier	100	1	350	3	400	4
3. Surface Ship	600	17	2,031	23	1,574	18
BOW DOMES	2,255	8	2,200	11	2,674	14
SUBMARINE PUMPS	2,002	39	2,200	30	2,200	30
1. H.P. Brine	813	13	935	15	935	15
2. Trim & Drain	855	8	1,200	12	1,200	12
3. Other	334	18	65	3	65	3

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
MAIN FEED PUMPS	1,921	11	2,200	11	2,200	11
1. CVA 60	-	-	-	-	-	-
2. Combatant	1,354	8	1,400	7	1,400	7
3. Auxiliary	567	3	800	4	800	4
OTHER HM&E	4,633	176	3,437	188	3,826	205
EQUIPMENT						
TOTAL 2S COG	31,906	413	37,486	455	36,567	478
REFIT						

G. MAJOR SHIP/BOAT REPAIR PROGRAM

1. Boat Rehab

Provide boats and landing craft, either new or repaired to replace those that are no longer economically repairable and to fill new allowances. Approximately 3,500 boats are in service ranging from 14 feet to 165 feet. Unit cost of issues and rehabs varies according to size of ship and extent of repair.

	FY 1985		FY 1986		FY 1987	
	\$	units	\$	units	\$	units
Total Funding	812		1,326		1,380	
=====						
Number of boats rehabilitated/ issued		54		87		110
a) Issued	110	46	195	76	192	96
b) Rehabilitated	702	8	1,131	11	1,188	14

2. LCM/LCU Rehabilitation and Modification

The LCM/LCU Rehabilitation and Modification Program consists of two parts.

a. The LCAC Life Cycle Support Program plans, develops, and implements LCAC configuration changes in response to safety requirements and fleet recommendations and updates craft capabilities. The program is a new start effective FY 1987.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

	FY 1985	FY 1986	FY 1987
	\$ Units	\$ Units	\$ Units
Total Funding	0	0	6,289
LCAC Life Cycle Support			4,084 12
In-Service Engineering			392
Configuration Management			229
Planning Yard			755
Craftalt Proposals			596
Engineering Design			366
Tech Manuals			207
Logistics Management			411
Repair/Replacement			430
Engineering Operating Cycle			265
Maintenance Records			160
Supply Support			273

Units = Number of LCACs supported.

b. The LCM/LCU Rehabilitation and Modernization of the Service Life Extension Program (SLEP) for LCM/LCU combatant landing craft is the second part of the program. These efforts are new in FY 87.

LCM/LCU Rehabilitation and Modernization

LCU Rehabilitation	2,205	3
Software Plans & Specs.	2,130	
Units = Number of craft.	75	

H. INACTIVE SHIP DEPOT MAINTENANCE

This program will upgrade ships in the inactive fleet to a condition which will allow them to be available for timely replacement of wartime fleet attrition. Currently, the inactive fleet is unable to reactivate rapidly in a national emergency. In FY 1985 this program funded survey, design and planning efforts for the condition assessments. Upgrade and preservation work will occur in Budget Activity 2, beginning in FY 1987.

	FY 1985	FY 1986	FY 1987
	\$ Units	\$ Units	\$ Units
TOTAL FUNDING	1,007	0	0
Survey Design & Planning	1,007	3	
LSD-29	336		
DD-941	334		
AO-51	337		

Maintenance (upgrade and preservation) work is budgeted in Rudget Activity 2 beginning FY 1987.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

I. CG-47/DDG-51 WEAPONS SYSTEM MAINTENANCE

CG-47/DDG-51 Weapon System Maintenance covers depot repair of AEGIS Combat System electronic components and high power tubes. Repair of electronic components such as power supplies, printed circuit boards and electronic chassis is accomplished at the depot operated by RCA, Moorestown, NJ. Repair of power tubes including cross-field amplifiers, 10KW traveling wave tubes, 40 watt tubes and continuous wave illuminator tubes is conducted at the Naval Weapons Support Center (NWSC), Crane, IN. Reclamation of failed, but repairable tubes and electronic components is cost effective in that unit repair costs are less than 50% of new procurement costs and the repair turn-around time is less than 60% of the procurement lead time required for new items. The increase in the FY 1987 request reflects the requirement for greater capacity to handle repair backlog and the rapidly increasing AEGIS fleet. Since the AEGIS fleet is planned to grow to at least 56 cruisers and destroyers by the year 2000, deliberate growth can be expected in this line for some years to come.

AEGIS Combat System Computer Program Maintenance is conducted at the AEGIS Computer Center (ACC), Dahlgren, VA. The ACC contains major AEGIS Computers, peripherals, and computer program production equipments which are used to assist shipboard operators. This assistance includes: (1) computer program production engineering involving the periodic receipt, verification, and validation of new computer programs for fleet units and shore training sites; (2) ship visits and technical assists to provide special teams to identify shipboard computer program problems; and (3) computer program maintenance which involves the resolution of problems identified aboard ship or at shore training sites. This requirement is driven by operational needs. This line also funds computer program changes required for backfitting AEGIS Combat Systems with upgraded military or technical characteristics that meet emergent threats. Included in these backfit computer program changes are those required for the backfit of UYK-43 Computers to CG's-47-64. These backfits are scheduled for installation during ship maintenance availabilities and overhaul periods.

The large increase from FY 1986 to FY 1987 is caused mainly by the transfer of AEGIS Combat System Computer Program Maintenance to this line. It does not represent increase in work but a funding realignment.

	FY 1985		FY 1986		FY 1987
	\$ Units		\$ Units		\$ Units
Total Funding	7,095		9,931		31,618
	=====				

Weapon System Maintenance Funding

	Total					
	7,095		9,931		14,306	
1. Electrical Components Repaired	6,314	1,730	8,223	2,210	11,903	3,146
2. Tubes Repaired	781	139	1,708	270	2,403	357

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

	\$ <u>FY 1985</u>	Units	\$ <u>FY 1986</u>	Units	\$ <u>FY 1987</u>	Units
<u>Computer Program Maintenance Funding</u>						
Total	(8,728)		(10,873)		17,312	
3. C/P Deliveries *	(805)	(3)	(974)	(3)	2,316	6
4. C/P Tech-Assists *	-	-	-	-	617	6
5. C/P Maint Problem Resolutions *	(6,130)	(429)	(7,628)	(512)	12,409	667
6. C/P Backfit Mods *	(1,793)	(8)	(2,271)	(9)	1,970	7

( ) Non-Add

\* Transferred from Ship Systems Software Maintenance in FY 1987.

J. SHIP SYSTEMS SOFTWARE MAINTENANCE

Ship Systems Software funds the maintenance of complex computer programs for specific shipboard weapon and command and control systems. In FY 1987, funding for Long Range, Medium Range, and AEGIS systems software maintenance transfers to their other respective depot maintenance programs. This is in order to show total depot costs for weapons system as accurately as possible. The detailed performance criteria for AEGIS software maintenance is reflected in CG-47/DDG-51 Weapons System Maintenance subactivity group above for FY 1985 through FY 1987.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Total Funding	\$46,228	\$57,593	\$41,893

Specific maintenance program descriptions are as follows:

1. FCDSSA Software Maintenance

Provides for the planning, designing, producing, testing, and delivery of updated tactical computer programs and associated documentation for tactical command and control systems on surface combatants and selected aircraft. In addition, this program provides technical assistance and computer programs to shore establishments and supports communication systems, satellite systems, and navigation systems.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

	FY 1985	FY 1986	FY 1987
	\$ Units	\$ Units	\$ Units
FCDSSA	21,214	24,744	25,996
=====			
Efforts Funded			
1. Surf Tac.			
Data Sys	<u>7,638</u>	<u>8,979</u>	<u>9,394</u>
(No. of Ships Supported)	147	152	157
2. Air Tac.			
Data Sys.	<u>1,151</u>	<u>1,295</u>	<u>1,360</u>
(No. of Aircraft Supported)	93	93	94
3. Spt. Software, Commun. & Tac. Intelligence Systems	<u>563</u>	<u>2,575</u>	<u>1,770</u>
4. Facility Req. Maint. and General Costs	<u>11,862</u>	<u>11,895</u>	<u>13,472</u>
A. Computer Cent Op. Maintenance	(5,863)	(5,964)	(6,172)
B. Util & Plant Maint	(2,742)	(3,315)	(4,040)
C. Management & Admin	(3,257)	(2,616)	(3,260)

2. Sonar Systems Software Maintenance

This program maintains computer programs for the LAMPS MK III integrated aircraft/shipboard weapons system, which includes both the SH-60B helicopter and the AN/SQQ-28(V) sonar processor.

	FY 1985	FY 1986	FY 1987
	\$ Units	\$ Units	\$ Units
Total Funding	2,488	5,477	4,567
No. of LAMPS Systems	25	34	48
=====			
1. LAMPS System Level Software Mtce & Support	288	850	991
2. SH-60B Software Maintenance	828	1,615	1,064
3. AN/SQQ-28 Software Maintenance	1,372	3,012	2,512



Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

3. Long Range Software Maintenance

Provides problem analysis, coding, proofing and system checkout for shipboard operational computer programs for the Terrier missile systems. The computer programs control all switchboard defense systems such as the launching system, fire control system, and radar detecting tracking system to provide quick reaction control. These programs are constantly updated to reflect upgraded Terrier system capability such as the SM-2 extended range missile, part of the new threat upgrade (NTU) program to combat the Backfire bomber threat.

	FY 1985		FY 1986		FY 1987
	\$	Units	\$	Units	\$ Units
Long Range Software Maintenance	1,611	89	2,303	100	0

\*\* Program realigns in FY 1987 to Long Range Missile Weapons Systems.

4. Medium Range Software Maintenance

Tactical computer program maintenance provides maintenance and modification to operational computer programs and the auxiliary programs used to support and test the operational programs. Maintenance is performed at the computer program facility, Port Hueneme, CA.

	FY 1985		FY 1986		FY 1987
	\$	Units	\$	Units	\$ Units
Medium Range Software Maintenance	1,523	92	1,686	89	0

\* Program realigns in FY 1987 to Medium Range Missile Weapons Systems.

5. AEGIS Combat Systems Computer Program Maintenance

	FY 1985		FY 1986		FY 1987
	\$	Units	\$	Units	\$ Units
Total Funding	8,728		10,873		0

\* Transfers to CG-47/DDG-51 Weapons System Maintenance Program in FY 1987.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria (cont'd)

6. Tactical Embedded Computer Software Maintenance

Provides engineering support acquisition management, life cycle support, and configuration control of existing and future tactical embedded computer systems. Maintenance actions, which include lab review, new documentation, new tapes, and testing; vary in cost from \$2 thousand to \$25 thousand.

	FY 1985		FY 1986		FY 1987**
	\$	Units	\$	Units	\$
Total Funding	10,664		12,510		11,330
=====					
In-Service Engineering	4,865		6,130		5,551
AN/UYK-43(V)		350		350	
and AN/UYK-44(V)					
computers supported					700
In-Service Eng. computers, peripherals, displays	399		1,126	9,900	1,020
					11,600
Software maint	5,400		5,254		4,759
No. Fleet computers supported (in-service)		7,000		10,000	
					11,510
No. Maint actions		1,400		1,350	
					1,250

IV. Personnel Summary (End Strength)

	FY 1985	FY 1986	FY 1987
A. <u>Civilian E/S</u>	<u>270</u>	<u>275</u>	<u>275</u>
USDH	<u>270</u>	<u>275</u>	<u>275</u>

DEPARTMENT OF THE NAVY  
OPERATION & MAINTENANCE, NAVY  
Exhibit OP-05

Activity Group: Intermediate Maintenance  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Sea Systems Command

I. Description of Operations Financed.

The Intermediate Maintenance Activity Group funds that maintenance which supports Organizational Level Maintenance. Its phases usually consist of calibration, repair or replacement of damaged or unserviceable parts, components or assemblies; the manufacture of critical nonavailable parts; and technical assistance to organizations using the equipment. Intermediate maintenance of equipment is normally accomplished in fixed or mobile shops, tenders, shore based repair facilities, or by mobile teams.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Surface Warfare Systems						
IM Point Defense	462	523	519	293	132	-161
IM Missile Systems	10,147	9,188	9,158	8,849	9,842	993
IM Mines	2,025	1,884	1,872	1,518	1,988	470
Undersea Warfare Systems						
IM 2F Cog ASW	2,359	3,247	3,231	2,512	2,225	-287
TOTAL, INTER MAINT	14,993	14,842	14,780	13,172	14,187	1,015

Activity Group: Intermediate Maintenance (cont'd)

B. <u>Reconciliation of Increases and Decreases</u>	Amount
1. FY 1986 Current Estimate	\$13,172
2. Pricing Adjustments	696
A. Industrial Fund Rates	(635)
B. Other Pricing	(61)
3. Program Increases	2,228
A. Other Program Growth in FY 1987	
1) <u>SURFACE WARFARE SYSTEMS</u>	
a) <u>Missile Systems Intermediate Maintenance</u> To service an increase of 517 missiles due to an expanded inventory, including Vertical Launch System startup and SM-2 buildup.	1,781
b) <u>Mines Intermediate Maintenance</u> Increase reflects support for 983 additional mines (270) and 1,921 additional destructors (139).	409
2) <u>Undersea Warfare Systems</u>	38
a) <u>2F Cog USW Intermediate Maintenance</u> Increase for 6 additional SSBN periscopes	
4. Program Decreases	-1,909
A. Other Program Decreases in FY 1987	(-1,909)
1) <u>Civilian Ceiling Waiver</u>	-62
Savings attributable to more effi- cient and economical execution of work load experienced resulting from waiver of statutory end strength ceiling in FY 1985.	
2) <u>SURFACE WARFARE SYSTEMS</u>	
a) <u>Point Defense Intermediate Maintenance</u> Reduction reflects decreased intermediate maintenance and technical assistance for 4 fewer systems and 2 fewer Basic Point Defense Surface Ships.	-178
b) <u>Missile Systems Intermediate Maintenance</u> Decrease test and assembly effort for 500 SM-1 missiles.	-1,270
3) <u>UNDERSEA WARFARE SYSTEMS</u>	
a) <u>2F Cog USW Intermediate Maintenance</u> Reduction of 2.6 workyears for STASS equipments (360) and decrease of 1 periscope repair for SSNs (39).	-399
5. FY 1987 President's Budget Request	\$14,187

Activity Group: Intermediate Maintenance (cont'd)

### III. Performance Criteria

#### A. SURFACE WARFARE SYSTEMS

##### 1. Point Defense

Provides intermediate maintenance support for Basic Point Defense Surface Missile Systems. Waterfront support to ships is provided by Naval Sea Support Centers for intermediate maintenance and technical assistance to correct CASREPs and remove, replace or repair defective components.

Funding profile supports the removal of these systems by the end of FY 1988.

	<u>FY 1985</u> \$    Units	<u>FY 1986</u> \$    Units	<u>FY 1987</u> \$    Units
Total Funding	462	293	132
=====			

	<u>FY 1985</u> Sys/Ships	<u>FY 1986</u> Sys/Ships	<u>FY 1987</u> Sys/Ships
BPDSMS	49    34	40    25	36    23

##### 2. Missile Systems Intermediate Maintenance

Intermediate level maintenance consists of the test and assembly of missile rounds prior to load out of combatant and deployed logistics support force ships. Missile electronics require certification by test equipment at least every three years as explosive components are service life limited. The four Naval Weapons Stations perform this effort.

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	\$	Units	\$	Units	\$	Units
Total Funding	10,147	3,854	8,849	3,181	9,842	3,198
=====						

VLS	-	-	-	-	152	51
BT	214	102	357	110	375	110
STD MSL-1	7,902	3,194	5,989	2,471	4,948	1,971
STD MSL-2	1,175	405	1,990	490	3,838	956
Special Wpns	856	153	513	110	529	110

Units are the number of missiles ready for issue.

Activity Group: Intermediate Maintenance (cont'd)

III. Performance Criteria (cont'd)

Number of ships supported:

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Extended Range Missile			
Combatants			
(CG, CGN, DDG)	31	31	31
Medium Range Missile			
Combatants			
(CF, CGN, DDG, FFG)	93	95	94
Mobile Logistics Force			
(AOE, AE, AOR, AO)	27	27	27

3. Mine Intermediate Maintenance

Supports intermediate level maintenance of mines and destructor systems. Includes screening, testing, adjustment, and replacement of mine components and field calibration/repair of test equipment. (Units are numbers of mine and destructor systems, respectively, that are maintained.)

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	\$	Units	\$	Units	\$	Units
Total						
Funding	2,025	14,126	1,518	9,994	1,988	12,898
=====						
Mines, MK 25,	1,539	6,497	1,154	4,423	1,471	5,406
56,57,62,63,						
64,65,67						
Destructors	486	7,629	364	5,571	517	7,492
MK 36, 40,						
41, 117						

B. UNDERSEA WARFARE SYSTEMS

1. 2F Cog Electronics USW - IM

The program provides pre-repair test and failure analysis; repair/replacement of damaged or unserviceable parts, components, modules, cables, or assemblies; manufacture of critical nonavailable parts; array and cable certification; post-repair test and calibration, and technical assistance to organizations using AN/WQM-6, STASS 2F Cog USW equipment, periscopes and the AN/SQS-35 Sonar Sensing Unit (SSU).

Program requirements are based on quantities of installed equipment, the age of equipment, the cycle time required to repair items, the position of the installed equipment on the ship, issue rates of equipment to the fleet and emergent fleet problems. Costs include material, travel, shipping, and administrative support.

Activity Group: Intermediate Maintenance (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	Units*	\$	Units*	\$	Units*
Total Funding	2,359		2,512		2,225	
=====						
<u>SSBN</u>						
Sonar						
Equipment	195	1.9	186	1.8	181	1.7
Periscopes	197	22	244	26	291	32
<u>SSN/ASW Ships</u>						
Sonar						
Equipment	1,096	9	1,219	9.5	904	7
Periscopes	871	19	863	18	849	17

\* Units are workyears for sonar equipment and numbers of components for periscopes.

IV. Personnel Summary. (End Strength) N/A

DEPARTMENT OF THE NAVY  
OPERATION & MAINTENANCE, NAVY  
Exhibit OP-05

Activity Group: Maintenance Support  
Budget Activity: 7-Central Supply and Maintenance  
Claimant: Naval Sea Systems Command

I. Description of Operations Financed

The Maintenance Support Activity Group supports functions which are not a part of depot, intermediate or organizational maintenance, but which facilitate and perpetuate any or all of those levels of maintenance. Maintenance support can be divided into: programming and planning support which includes long range workload scheduling and resource utilization, centralized planning for all maintenance all logistics support efforts (except engineering) for the development of weapon system and weapon support activity maintenance requirements; maintenance technical and engineering support, which includes technical and engineering efforts in the development of maintainability concepts and the maintenance portion of logistics plans dealing with weapons and equipment; and technical and engineering data, which includes the preparation of technical and engineering data for all types of equipment, and provides for the preparation, editorial review and/or revision of equipment publications pertaining to the operation, repair and repair parts support of DOD material.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	FY 1985	Budget Request	FY 1986 Appropriation	Current Estimate	1987 Budget Request	Change
Surface Warfare Systems						
MS Mine Maint Spt	7,350	9,465	9,230	8,211	5,580	-2,631
MS Coast Guard EMS	536	653	644	503	579	76
MS Gun Weapon System	1,460	2,159	1,941	1,607	1,679	72
MS Pnt Def Maint Spt	1,191	1,374	1,374	0	169	169
MS Lng Rng Msl Sys Mnt	9,196	11,547	11,565	10,579	10,727	148
MS Med Rng Msl Sys Mnt	13,656	17,416	16,418	15,798	18,095	2,297
MS Missile Maint Spt	7,044	8,899	8,850	7,970	10,288	2,318
MS Self Defense Surf						
Wpn Sys	13,724	14,787	14,592	16,898	15,156	-1,742
MS Search Radar	11,669	13,274	12,715	10,226	10,555	329
MS Vert Launch Sys	753	2,001	1,971	1,062	4,452	3,390
MS INSPECWAR	1,954	3,356	2,957	3,216	5,167	1,951
ASW Maint Support	10,316	9,149	8,104	10,283	11,864	1,581
Undersea Warfare Systems						
MS 2F Cog USW	495	478	466	516	524	8
MS Sub ASW Maint Spt	34,144	33,873	32,262	38,367	36,626	-1,741



Activity Group: Maintenance Support (Cont'd)

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Approp- riation</u>	<u>Current Estimate</u>	<u>1987 Budget Request</u>	<u>Change</u>
Electronic Systems						
MS TMDE/METCAL	4,409	4,331	4,364	3,533	2,624	-909
Ammunition Systems						
MS Ammunition	3,075	2,789	2,769	2,672	3,274	602
Pollution Abatement						
MS Plutn Abatement EMS	1,834	1,664	1,719	1,669	1,535	-134
Diving & Salvage						
MS Salvage EMS	657	584	584	524	741	217
Inact Ship Maint Spt						
MS Inactive Ship	6,262	7,165	7,200	6,951	6,705	-246
CG 47/DDG 51 Wpn Sys EM						
MS AEGIS Systems	7,256	35,138	30,593	30,607	37,281	6,674
Aviation ASW Maint Spt						
Aviation ASW Maint Spt	4,078	4,994	4,851	4,154	1,999	-2,155
ASP Maintenance Support						
NSSP Maintenance Support	502	5,198	5,165	5,175	4,887	-288
TOTAL, MAINT SUPPORT	141,561	190,294	180,334	180,521	190,507	9,986

Activity Group: Maintenance Support (Cont'd)

B. <u>Reconciliation of Increases and Decreases</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$180,521
2. Pricing Adjustment	7,713
A. Stock Fund (13) 1) Non-Fuel 13 B. Industrial Fund Rates (4,636) C. High Grade Reduction (-82) D. Annualization of Civilian Health Benefits (-1) E. Other Pricing (3,147)	
3. Functional Transfers	-4,507
A. Transfers-out (-4,507) 1) Inter-Appropriation a) <u>SURFACE WARFARE SYSTEMS</u> i) <u>Mine Maintenance Support</u> -3,572 Funds for Mine Countermeasure transferred to O&M,NR, MCM Maintenance Support. ii) <u>Medium Range Missile Maintenance Support</u> -935 Funds for Medium Range Missile transferred to O&M,NR for maintenance support for FFG-7 Class ships in Naval Reserve.	
4. Program Increases	26,713
A. Other Program Growth in FY 1987 (26,713) 1) <u>SURFACE WARFARE SYSTEMS</u> a) <u>Mine Maintenance Support</u> 2,290 Increase reflects additional Mine Maintenance (equipment analyses, systems performance evaluations, document and data resource compilation) for 1,445 mines (101); 2,424 Destructors (106); increased mine component support (135); increased installation and maintenance support for the Craft of Opportunity Program (COOP), (216); increased Mine Countermeasures Maintenance Support for more expensive and complex MCM systems. Specific increases are: Mine Hunting Systems (477); Mine Neutrali- zation System (326); Mine Sweeping Systems (311); Mine Navigation Systems (618). b) <u>Coast Guard MS</u> 51 Increase due to support of 2 additional Coast Guard cutters.	

Activity Group: Maintenance Support (Cont'd)

<u>B. Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
c) <u>Point Defense Systems MS</u> Commencement of support for the STINGER (FIM-92A).	169
d) <u>Medium Range Systems MS</u> Increased in-service-engineering technical, maintenance installation, ship installation, test qualification and fleet support (1,923). Also, program responsibility for 9 additional ships with the MK 92 FCS will commence in FY 1987 (2 CG-47, 3 FFG-7, 2 WMEC, 2 WHEC) (529).	2,452
e) <u>Missile Systems MS</u> Increase of 24 workyears enables full support of depot, weapons stations and ships in SM-2 ISEA and flight firing analysis.	1,896
f) <u>Search Radar MS</u> Additional funding will support improvements in the reliability and maintainability of the AN/SPS-48 and AN/SPS-49 radars with increased field engineering analysis and a greater number of planned ship visits.	167
g) <u>Vertical Launch System MS</u> Will provide integrated logistics and in-service-engineering support for 5 additional surface ships (CG-53, 54, 55 and DD-963, 991) (686). In addition, computer programming support and reliability, maintainability and availability efforts increase by 3.7 workyears (347). FY 1987 represents a new start for submarine VLS, providing maintenance support for the VLS missile tube system (MTS) electronic equipment, VLS MTS mechanical equipment, and VLS fire control system electronic equipment (2,367).	3,400
h) <u>Inshore Special Warfare MS</u> The expanding requirements for special operations forces and the introduction of new equipments has increased funding projections. Support is provided for the Swimmer Area Navigation System (100), and handheld sonar (350). One additional Dry Deck Shelter will be supported (849) and additional support is required for the Swimmer Delivery Vehicle (248). Maintenance support will be required for swimmer weapons, including limpets and firing systems as well as laser range finders (380), and other special warfare equipment (194).	2,121

Activity Group: Maintenance Support (Cont'd)

B. <u>Reconciliation of Increases and Decreases (Cont'd)</u>	<u>Amount</u>
i) <u>Surface ASW Maintenance</u> FCS - Provides additional FCS ISE support for the MK 111/114, ASW switchboards, UFCS Mk16-0,1,2,3,4 and CP MK309 (515). Sensor Maintenance Support - Primarily: additional Sensor ISEA services to maintain proper configuration and assure required operating performance levels of all installed sonar systems (507); also supports first time installation of 2 AN/SQR-18As (382). New start to support Vertical Launch ASROC VLA (532).	1,936
2) <u>UNDERWATER WARFARE SYSTEMS</u> a) <u>Submarine ASW-MS</u> SUBROC - increase supports the extension of the operational life (444); Sensors support for additional operational AN/BQQ-5's (939) and engineering support for procurement of spare parts, and control and documentation procedures for the Submarine Advanced Combat System (SUBACS) (647).	2,030
3) <u>AMMUNITION MAINTENANCE SUPPORT</u> a) <u>Ammunition MS</u> Increase reflects 8 additional workyears for maintenance support services to restore the program to the FY 1985 level of effort. Specifically, funding provides for Ammunition Malfunction Investigations and updating of Ammunition, Technical Publications to support Fleet operations.	476
4) <u>POLLUTION ABATEMENT</u> a) <u>Pollution Abatement</u>	15
5) <u>DIVING AND SALVAGE</u> a) <u>Salvage EMS</u> Increase in complexity of salvage equipment design mods (34) and additional documentation procedures (171).	205
6) <u>CG47/DDG51 WEAPON SYSTEM MS</u> a) <u>AEGIS Systems MS</u> Increase reflects increased planning yard requirements associated with planning for 3 additional availabilities and 3 additional operational ships (3,575); increased in-service engineering (912); increased operational and maintenance requirements associated with operating the AEGIS Computer Center and AEGIS Combat System Center for a full year vice one half year in FY 1986 (5,018).	9,505

Activity Group: Maintenance Support (cont'd)

B. <u>Reconciliation of Increases and Decreases (Cont'd)</u>	<u>Amount</u>
5. Program Decreases	-19,933
A. One-Time Decrease (-3,949)	
1) CG47/DDG51 WEAPON SYSTEM MS Completion of AEGIS and Computer Center and partial completion of AEGIS Combat System Center site activation costs.	-3,949
B. Other Program Decreases in FY 1987 (-15,984)	
1) Efficiency Reviews Savings projected from scheduled efficiency review.	-192
2) Civilian Ceiling Waiver Savings attributable to more efficient and economical execution of workload experienced resulting from waiver of statutory end strength ceilings in FY 1985.	-1,030
3) SURFACE WARFARE SYSTEMS	
a) Mines MS Reduction reflects realignment of Craft of Opportunity Program (COOP) to O&MNP.	-1,696
b) Long Range Missile MS Decrease provides for 325 fewer technical documentation updates in FY 1987 and reduces the number of ship assistance team visits by five.	-350
c) Self Defense Surface Weapons System Reduced support for installation and checkout of systems and ORDALTS for the NATO Seasparrow Surface Missile System.	-2,487
d) INSPECWAR Thermal protection systems will not be provided in FY 1987.	-262
e) Surface ASW Maintenance Support MK 46 - Reduced IMA support (-378) ASROC - Reduction of the ASROC upgrade program which aims to eliminate obsolete materials, components and processes in the ASROC weapon system (-316)	-694
4) UNDERSEA WARFARE SYSTEMS	
a) 2F Cog USW Maintenance Support	-2
b) Submarine ASW Maintenance Support MK 48 Torpedo reflects decreased MK 48 depot IMA and DLR work. (-4,013). Sensors: Reduced support for the Trans ducer Repair Facility/Towed Line Arrays will decrease introduction to the fleet (-750).	-4,763
5) ELECTRONIC SYSTEMS	
a) TMDE/METCAL Reduction reflects reduced support of 10.4 workyears for METCAL engineering.	-1,082

Activity Group: Maintenance Support (Cont'd)

B. <u>Reconciliation of Increases and Decreases (Cont'd)</u>	<u>Amount</u>
6) POLLUTION ABATEMENT a) <u>Pollution Abatement</u> -216 Decrease in funding will reduce technical documentation system certification and mach/alt proposals required to meet Fleet requirements to install sewage system certifications.	
7) INACTIVE SHIP MAINTENANCE SUPPORT a) <u>Inactive Ship MS</u> -451 Decrease results from reduced GOCO contract (-278) and maintenance and support costs (-173).	
8) ASP MAINTENANCE SUPPORT a) <u>NSSP MS</u> -521 Reduced maintenance engineering support and program management for the standard signal processor. In addition, delays organic in-service engineering support of EMSP.	
9) AVIATION ASW MS a) <u>Aviation ASW MS</u> -2,238 CV ASW Module program-reduction is primarily due to 1) an FY 1987 funding realignment of efforts pertaining to technical assistance, installations, Engineering Support, Drawings, manuals, publications, other ILS support and ASW tape recorders to Surface ASW Technical Support(-1,683); and, 2) reduction of program requirements due to such factors as the nearing completion of the S-3B Computer Program (-555).	
6. FY 1987 President's Budget Request	\$190,507

Activity Group: Maintenance Support (Cont'd)

III. Performance Criteria

A. SURFACE WARFARE SYSTEMS

1. Mine Maintenance Support

Covers four task areas: (1) Mine Maintenance Support - (a) equipment maintenance analyses to develop solutions to problems identified by the fleet, (b) maintenance procedures and systems performance issues at depot and intermediate sites, and (c) programs for material receipts, document resource, data and report compilation; (2) MCM Maintenance Support - Tasks are similar to mine maintenance support. While maintenance support is related to the size of the stockpile being maintained at depot/intermediate levels, it is also driven by the types of systems in maintenance and the complexity of the systems involved. Thus, anomalies can exist between funding and the units; (3) Mine Warfare Planning - Involves maintenance of mining and MCM planning and tactical procedures, including both hardware and software systems; and (4) Craft of Opportunity Program (COOP) - This involves the installation, fleet introduction, and maintenance of the MCM equipment for the COOP boats.

		<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>
	\$	Units	\$	Units	\$	Units
Total Funding	7,350		8,211		5,580	
Mine Maintenance Support						
Mines MK 25, 55, 56, 57, 63, 65, 67	951	6,314	1,202	4,726	1,363	6,171
Units = Number of Mines						
Destructors MK 36, 40, 41, 117	979	7,416	1,290	5,738	1,460	8,162
Mine Components	1,191	63,015	1,498	53,218	1,709	44,669
Test Equipment	240	400	300	334	341	283
* MCM Maintenance Support						
Mine Sweeping Systems	116	208	122	187	0	0
Mine Hunting Systems	963	24	938	29	0	
Mine Navigations Systems	404	7	533	9	0	0
Mine Neutralization Sys	181	12	172	10	0	0
Units = Number of MCM System/Components						
Mine Warfare Planning	695	5	736	4	707	4
Units = Number of Major Systems Supported						
* COOP	1,630	0	1,420	1	0	0
Units = Number of COOP Boats in Service						

\* Funding for MCM and COOP transfer to O&M,NR in FY 1987.

Activity Group: Maintenance Support (Cont'd)

III. Performance Criteria (Cont'd)

2. Coast Guard EMS

Provides maintenance engineering support of Navy-owned weapons and ASW systems installed in U.S. Coast Guard ships. Funding supports gun, fire control and sonar systems on the High Endurance (WHEC) and Medium Endurance (WMEC) Cutters.

	FY 1985 \$ Units	FY 1986 \$ Units	FY 1987 \$ Units
Total Funding/WYs	536 7.0	503 6.8	579 7.7
No. of Cutters Supported	16	17	19

3. Gun Weapon System Maintenance Support

Provides engineering and management support for the gun weapon system maintenance and modernization programs, hydraulic fluid replacement, and test gun mount maintenance. In FY 1987, fewer 3"/50 gun systems will be supported; however, funding requirements remain unchanged since the maintenance support efforts are dominated by requirements for the newer systems, such as 5"/54 gun systems.

	FY 1985 \$ Units	FY 1986 \$ Units	FY 1987 \$ Units
Total Funding	1,460	1,607	1,679
No. of Gun Systems Supported	755	755	742

4. Point Defense Maintenance Support

Basic Point Defense Surface Missile Systems - Through FY 1985, provides support for 41 systems installed on 33 ships of the fleet. Support includes: operational and maintenance efforts by the Navy Ship Weapon Systems Engineering Station (NSWSES), including development of reliability and maintainability ORDALTS engineering assistance for the correction of casualties, and planning support for ship qualification tests

STINGER - Provides support for the STINGER (FIM-92A) System which requires engineering and logistics work by inservice and ships integration agents. This support includes documentation, training, engineering changes, on-site assistance, technical advance, provisioning, spares and logistics.

	FY 1985 \$ WY	FY 1986* \$ WY	FY 1987** \$ WY
Total Funding	1,191 19.4	0	169 2.2
No. of Sys. Supported	41	-	-

\* Remaining support for the Basic Point Defense System has been transferred to Self Defense Surface Weapon Systems MS.

\*\* FY 1987 will be the first year of support for the STINGER system.



Activity Group: Maintenance Support (cont'd)

III. Performance Criteria (cont'd)

5. Long Range Missile System Maintenance

Provides installation, test, qualification support and in-service engineering for TERRIER weapon systems on 31 AAW ships. These systems include 90 fire control systems 45 launching systems, and 5 weapon direction systems.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Total Funding	\$9,196	\$10,579	\$10,727

# of Reports,  
Ship Visits  
Doc/Corrective  
Actions

12,051	13,739	13,409
--------	--------	--------

Engineering teams monitor the configuration and installation of ORDALTS and planned improvements in the TERRIER Weapon Systems; test simulation and technical operation; and conduct detailed audits of the capability of weapon systems and the operators of those systems. In-service engineering includes ship assistance visits, remedying casualty reports, and writing technical feedback reports, technical document changes, and engineering change proposals.

6. Medium Range Missile System Maintenance

Maintenance support includes technical support and material services required for operation, maintenance installation support, Ship installation/Test Qualification, In-Service Engineering Agent, and Fleet Support.

	<u>FY 1985</u> \$ Units	<u>FY 1986</u> \$ Units	<u>FY 1987</u> \$ Units
Total Funding/* Sys. Supported	\$13,656 291	\$15,798 318	\$18,095 379

\* In FY 1987 \$935 thousand transferred to O&M,NR; Missile Weapons Systems Maintenance.

a. Ship Installation/Test/Qualification Support

<u>FY 1985</u> \$ Units	<u>FY 1986</u> \$ Units	<u>FY 1987</u> \$ Units
1,722 115	2,350 145	2,988 177

Units include the number of teams and tasks associated with this support.

Activity Group: Maintenance Support (Cont'd)

III. Performance Criteria (Cont'd)

Support comprises FFG/DDG/CGN combat system ship qualification teams, combat system readiness reviews, provisioning support, regular overhaul support, follow on test and evaluation, ORDALT proofing and installation and checkout test support for the following classes:

<u>Ship Class</u>	<u>FY 85</u>	<u>FY 86</u>	<u>FY 87</u>
FFG-7	10	7	12
DDG-2	1	2	1
DDG-15	4	3	2
CGN-36	-	-	-
CGN-38	1	3	2
FFG-1	1	3	3
			-
TOTALS	17	18	20

b. In-Service Engineering Agent/Fleet Support

<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
\$	Units	\$	Units	\$	Units
11,934	2,498	13,448	2,887	15,107	3,085

Units include the number of casualty reports/tech assist actions, reliability/maintainability/availability support actions, technical feedback reports, and other fleet support tasks for the TARTAR missile program. Ship classes supported are:

<u>Ship Class</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
DDG-2	13	13	13
DDG-15	10	10	10
FFG-1	6	6	6
CGN-36	2	2	2
CGN-38	4	4	4
DDG-993	4	4	4
FFG-7	38	46	47
PHM-1	6	6	6
CG-47	1	2	4
WMEC	4	7	9
WHEC	1	2	4
TOTAL	89	102	109

7. Missile Maintenance Support

Maintenance support independent of the depot and intermediate level operations consists of telemetry and in-service engineering functions that support missile flight operations, missile logistics and technical support of design changes. This effort includes the maintenance and update of the flight testing data base for the analysis of flight firings.

Activity Group: Maintenance Support (Cont'd)

III. Performance Criteria (Cont'd)

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	\$	WYR	\$	WYR	\$	WYR
Total Funding	7,044	98	7,970	112	10,288	136
=====						
TERRIER/TARTAR	67	1	0	0	0	0
BT	67	1	70	1	74	1
STD MSL-1	4,881	65	4,098	51	3,745	44
STD MSL-2	412	6	1,910	31	3,696	51
Special Weapons	135	2	0	0	0	0
Indus. Eng.	307	5	670	11	990	15
UHF Telemetry	1,175	18	1,222	18	1,783	25

Number of ships supported:

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Extended Range			
Missile Combatants			
(CG, CGN, DDG)	31	31	31
Medium Range			
Missile			
Combatants			
(CG, CGN,			
DDG, FFG)	85	95	92
Mobile Logistics			
Force			
(AOE, AE,			
AOR, AO)	27	27	27

8. Self Defense Surface Weapon System Maintenance Support

The program provides installation, operation and maintenance support of the Improved Self-Defense Missile System Program (NATO SEASPARROW Surface Missile System (NSSMS) and MK-23 Target Acquisition System (TAS)) installed on CV/CVN's, AOE, AOR, DD-963 and LHD class ships. (This program also provides support for the Basic Point Defense Surface Missile System operations on LPH, LHA, LCC and FF-1052 class ships and CV 41).

Specific tasks include:

Quick reaction technical and engineering support to sustain a high level of system availability. Resolution of casualty reports; conducting configuration management, evaluating system reliability/maintainability/availability to improve system performance, reviewing and updating documentation and computer programs with respect to operational inputs, and performing necessary logistics support efforts essential to maintain systems in operation.

Perform efforts to improve system operational availability pursuant to Detection Action Response Technique (DART).

Activity Group: Maintenance Support (Cont'd)

III. Performance Criteria (Cont'd)

Conduct installation preplanning, assistance in actual installation and checkout of systems and ORDALTs, maintain installation documentation, coordinate installation spares and repairs, and perform Ship Qualification Trials (SQT).

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
Total Funding	\$13,724		16,898		\$15,156	
=====						
Operational Systems Supported	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	<u>Sys/Ships</u>		<u>Sys/ships</u>		<u>Sys/Ships</u>	
NSSMS	70	53	73	54	79	56
TAS	26	26	30	30	33	33
BPDSMS	49	34	40	25	36	23

9. Search Radar Maintenance Support

This program provides technical engineering services required at shore stations, shipyards, and aboard ships in the operation and maintenance of nearly 1,000 search radars currently installed in the fleet, both in surface missile system (SMS) and non-SMS ships. These services provide in-service engineering and ship assistance team for Ship Qualification Trials (SQT), ship certification efforts, pre-deployment/pre-overhaul inspections, and emergent problems as well as equipment repair and modifications. Included in this program is the Anti-Air Warfare Readiness Program, which provides rapid response to SMS ships for 2D/3D air search radars, displays, ancillaries and supporting systems including the Integrated Automatic Detection and Tracking System (IADT) and the Radar Display and Disbursement System (RADDS). This effort provides high-value missile ships with urgently needed quick reaction engineering level assistance for training and problem resolution to provide improved equipment and system availability and reliability.

	\$ FY 1985		\$ FY 1986		\$ FY 1987	
	Units		Units		Units	
Total Funding	\$11,669		\$10,226		\$10,555	
=====						
1. In-Service Engineering	\$9,269		\$7,822		\$8,105	
3D Radar and IADT	3,861	120	3,331	105	3,459	103
2D Radar	2,777	252	1,772	213	1,827	205
Surface/Navigation	1,451	800	1,401	800	1,601	800
RADDS	1,180	5,200	1,318	5,200	1,218	5,200

(Units = # of In-Service Systems)

2. Anti-Air Warfare Readiness						
Ship Visits	\$1,700		\$1,804		\$1,850	
Field Change Installations	\$700		\$600		\$600	

Activity Group: Maintenance Support (Cont'd)

III. Performance Criteria (Cont'd)

10. Vertical Launch System (VLS) Maintenance Support

This program provides maintenance support for all levels of the Vertical Launching System (VLS) including long range planning of technical and engineering requirements, ILS, ISEA and computer programming. The Vertical Launching System will be in several ship variants including DD 963, CG 47 and DDG 51 Class ships. Maintenance requirements will continue to increase in the outyears as additional MK 41 VLS enter the fleet. The submarine VLS is a new start and is a direct result of the installation of VLS on all SSN 688 Class Submarines. This part of the program provides technical support the the VLS missile tube system (MTS) electronic equipment, VLS MTS mechanical equipment, and VLS fire control system (FCS) electronic equipment.

	FY 1985		FY 1986		FY 1987	
	\$	WYS	\$	WYS	\$	WYS
Total Funding	753		1,062		4,452	
-----						
Efforts Funded						
A. <u>Surface VLS</u>	<u>753</u>		<u>1,062</u>		<u>2,085</u>	
Integrated Logistic Spt	189	2.1	287	3.1	542	5.9
In-Service Eng. Agent	286	3.2	350	3.8	771	8.4
Computer Programming	248	2.8	393	4.3	688	7.4
Reliability, Maintainability, Availability	30	.3	32	.3	84	.9
B. <u>Submarine VLS</u>	-	-	-	-	<u>2,367</u>	-
VLS FCS ELec Tech Supp	-	-	-	-	643	-
VLS MTS Equip Tech Supp	-	-	-	-	1,724	-

11. Inshore Special Warfare Equipment Maintenance Support

Provides technical and engineering support for Swimmer delivery vehicles (SDV), dry deck shelters, production shelters, acoustic equipment, submersible training platforms and other special warfare equipment that support Sea-Air-Land (SEAL) teams in combat swimmer/SDV operations.

Activity Group: Maintenance Support (Cont'd)

III. Performance Criteria (Cont'd)

	\$	FY 1985 Units	\$	FY 1986 Units	\$	FY 1987 Units
Total Funding (\$000)	1,954		3,216		5,167	
=====						
a. Engineering/ Tech. support for SDVs (# of vehicles)	1,808	24	1,134	24	1,299	24
b. Dry Deck Shelters Spt (No. of DDS Sptd)			660	2	1,498	3
(Operational Cycles)		2		5		9
(Number of Submarines Configured)		1		2		4
c. DDS Certification			380	1	400	1
d. Swimmer Area Navigation System					100	15
e. SEAL Life Spt Sys (MK-15's and LAR V SCUBA)	108	245	98	160	292	346
f. Thermal Protection Units Procured			262	111		
g. Swimmer Weapons Systems Support			574		954	
h. Handheld Sonar					350	18
i. SEAL Delivery Systems	38		108	750	80	750
Rubber Raiding Craft Parachutes		61				
j. Other Special Warfare Equipment					194	

12. Surface ASW Maintenance Support

Provides for direct maintenance support of surface ship ASW weapon systems. Systems include ASW underwater fire control systems, sensors, torpedoes, torpedo tubes, the encapsulated Torpedo (CAPTOR), Anti-Submarine Launched Rockets (ASROC) and launchers. In addition, this program provides in-service engineering support for each system to ensure combat system readiness.

Unless units are reflected below, they can be considered to be comprised of items and workyears and/or items of varying mix which do not lend themselves to average pricing from one year to the next due to changes in the mix of workload. Additional backup data will be provided upon request.

Activity Group: Maintenance Support (Cont'd)

III. Performance Criteria (Cont'd)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	\$	\$	\$
Total Funding	10,316	10,283	11,864
=====			
a. Torpedo MS			
MK46	2,330	3,242	2,928
Torp TubeRework			
& test Spt	170	208	151
b. FCS MS	2,169	1,919	2,511
c. ASROC MS	1,142	1,237	970
d. Captor MS			
Refurb/repair			
Maint Spt	180	391	466
e. Sensor MS	4,325	3,286	4,306
f. VLA	0	0	532

B. ELECTRONICS SYSTEMS

1. 2F Cog Electronics USW - MS

Provides programming and planning support (work load scheduling and resource utilization and maintenance, technical and engineering support), for repairable 2F Cog Undersea Warfare Equipment such as sonar systems towed arrays, depth sounders, acoustic countermeasures, periscopes, undersea communication systems installed or to be installed in attack submarines, ballistic missile submarines, major surface combatants and support ships.

Program requirements are based on quantities of installed equipment, the age of equipment, the cycle time required to repair items, the position of the installed equipment on the ship, issue rates of equipment to the fleet and emergent fleet problems.

Transducers, hydrophones, and scanning switches are major components of a sonar system which receive support.

- Transducers receive and send signals and are used on active systems.
- Hydrophones, used on passive systems, only receive signals.
- Scanning switches are electro-mechanical switches made primarily of silver, which are necessary for a sonar system to process audio and visual signals.
- "Sonar equipment" designates various other components of sonar systems.

Activity Group: Maintenance Support (Cont'd)

III. Performance Criteria (Cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	WY	\$	WY	\$	WY
Total Funding	495	5.8	516	6.0	524	6.0
=====						
Transducers and Hydrophones	356	4.1	372	4.2	368	4.1
Scanning Switches	69	.9	0		0	
Sonar Equipment	70	.8	54	.6	62	.7
Periscopes	0		90	1.2	94	1.2

2. Submarine ASW Maintenance Support

This program provides for direct maintenance support of submarine ASW weapon systems. Systems include torpedoes, torpedo tubes, Submarine Launched Rockets (SUBROC), Sensors and underwater fire control systems. In addition, this program provides in-service engineering support for each system for the purpose of ensuring combat system readiness.

Unless units are reflected below, they can be considered to be comprised of items and workyears and/or items of varying mix which do not lend themselves to average pricing from one year to the next due to changes in the mix of workload. Additional backup data will be provided upon request.

	FY 1985	FY 1986	FY 1987
	\$	\$	\$
Total Funding	34,144	38,367	36,626
=====			
1. Torpedo MS			
a. MK 37	230	120	143
b. Torp Tube Rwk & Test Spt	450	300	278
c. MK 48 ISE	16,920	19,199	15,346
2. U/W FCS MS	6,773	7,567	8,035
3. Subroc Eng and Maint Spt	2,243	1,572	2,079
4. Sensor MS	7,528	9,609	10,745



Activity Group: Maintenance Support (cont'd)

III. Performance Criteria (cont'd)

C. ELECTRONIC SYSTEMS

1. TMDE/METCAL Support

The TMDE/METCAL program identifies electronic test equipment requirements for monitoring and maintaining the performance level of systems/equipments and calibration support required for maintaining mechanical and ordnance TMDE. TMDE is any device which measures, calibrates, gages, tests, inspects, monitors, diagnoses or otherwise examines the operating or physical characteristics of a system/equipment or materials/supplies. This maintenance support program supports (1) technical support required for the NAVSEA Metrology Program; (2) determination of calibration requirements based upon system operating requirements; (3) development and distribution of standardized documentation required for the calibration program; (4) determination of electronic test equipment required for reliability operating and maintaining systems/equipments; and (5) data systems for analyzing TMDE requirements and for calibration scheduling.

	FY 1985		FY 1986		FY 1987	
	\$	WY	\$	WY	\$	WY
Total Funding	4,409	49.4	3,533	38	2,624	27.6
=====						
METCAL Eng	3,542	39.6	3,532	38	2,624	27.6
TMDE Eng	792	9.0	1			
Measure	75	.8	0	0	0	0

The TMDE Engineering portion of this program transfers to Engineering and Support Services (Electronic Test and Repair) in FY 1986.

D. AMMUNITION MAINTENANCE SUPPORT

Maintenance Support Services - Provides engineering support both to investigate ammunition malfunctions and to prepare and update depot maintenance work requirements and automated data lists used by depot maintenance activities.

Joint Conventional Ammunition Program (ICAP) - Coordinates and takes action on all conventional ammunition logistic activities. Funding is provided for travel support of the Navy members (other than NAVSEA) designated as JCAP-Coordinating Group and Single Manager points of contact.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	3,075		2,672		3,274	
=====						
Maintenance Support Services/WY	3,011	30	2,608	23	3,210	31
JCAP/Number of Trips	64	71	64	71	64	71

Activity Group: Maintenance Support (Cont'd)

III. Performance Criteria (Cont'd)

E. POLLUTION ABATEMENT EMS

Reduces pollution such as oil wastes, sewage, solid waste, hazardous waste, and air pollution by providing for engineering technical and logistic support, and guidance to the fleet on shipboard treatment/management systems. Supports the installation, implementation and upgrade of those systems needed by the Navy to comply with environmental regulations. The benefits of pollution abatement efforts are compliance with regulations, access to foreign ports, freedom from litigation, and a data base to document environmental protection results. A description of some specific efforts follows:

Sewage - Installation and support of marine sanitation devices (MSD) on surface ships and small craft; monitor new and improved systems and incorporate improvements in the Fleet; resolve emergent operational problems.

Hazardous Waste - Provides the technical/administrative guidance to ensure the protection of the environment from hazardous waste discharges from Navy shore activities. Develops the shipboard operational procedures for handling and storing hazardous waste.

Solid Waste - Provides Navy ships and submarines with the capability to dispose of solid waste and classified documents on compliance with Navy regulations.

Open Sea Pollution Abatement - Provides funds for technical and engineering services required to develop planning, life-cycle engineering management, and integrated logistics support for open sea pollution abatement systems used to combat Navy spills at sea.

A description of output and the efforts involved follows:

No. of System Certification - units are the number of final reports on the certification inspections following the installation of pollution abatement systems. (Sewage and Oil Pollution, and Solid Waste)

No. of Ship Checks - units are the number of inspection visits to check-out pollution abatement systems following installations for both new construction and backfit on existing ships. (Sewage, Oil Pollution, and Solid Waste)

No. of Shipalt Proposals and Machalts - units are the number of installations of pollution abatement equipment on existing ships and modifications to equipments that are already installed. (Sewage, Oil Pollution, and Solid Waste)

No. of Technical Documentation (Manuals, Specs, Drawings) - this includes revisions to equipment tech manuals, updates of equipment specs and drawings, preparation and plans for fleet personnel dealing with pollution abatement afloat. (Sewage, Oily Waste, and Hazardous Waste).

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	\$	Units	\$	Units	\$	Unit
Total Funding (\$000)	\$1,834		\$1,669		\$1,535	
=====						
Direct Tasks:						
Oil Pollution	298		281		237	
Sewage	456		386		335	
Hazardous						
Waste	260		215		180	
Solid Waste	256		161		150	
Air Pollution	25		28		0	
Program						
Documentation	28		50		48	
Open Sea						
Pollution						
Abatement	511		548		585	
No. of System						
Certification		50		28		25
No. of Ship Checks		72		38		40
No. of Ship/						
Mach/Alts						
Proposals		30		37		27
No. of Technical						
documentation		29		46		35

F. DIVING AND SALVAGE

1. Salvage Maintenance Support

Program provides maintenance support for all Navy salvage equipment and operations. This includes:

- Developing designs, drawings, and specifications required to modify and improve Navy salvage equipment.
- Modifying and revising maintenance procedures, instructions, and associated documentation for all Navy salvage equipment.

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	\$	Units	\$	Units	\$	Unit
Total Funding (\$000)	657		524		741	
=====						
a) # of Salvage design mods	550	31	300	18	340	18
b) # of revised procedures, instructions, documents*	107	56	224	47	401	50

\* dollar requirements are driven by the mix of revisions required and complexity of procedures.

Activity Group: Maintenance Support (Cont'd)

III. Performance Criteria (Cont'd)

G. INACTIVE SHIP MAINTENANCE SUPPORT

This program supports the operation of Government-Owned Contractor-Operated (GOCO) Inactive Ship Maintenance Activities at Bremerton, WA., Portsmouth VA., Pearl Harbor, HI and Philadelphia, PA in accordance with the Commercial Activity (CA) program under OMB circular A-76. This program provides for the planning and execution of all maintenance and pre-activation requirements for the fleet, provides funding required for the disposal of ships, and reimburses the Maritime Administration (MARAD) for costs associated with the disposal of vessels in MARAD custody.

The industrial effort required is performed by either private or naval ship-yards with the Inactive Ship Maintenance Activity performing custodial and non-industrial technical guidance in connection with maintenance, drydocking, and disposal functions.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	6,262	109/95	6,951	116/110	6,705	116/110
(# ships/# craft)						
=====						
1. Civ. Pers (WY)	1,080	38	1,106	39	1,161	41
2. Contract Cost,						
GOCO(WY)	4,101	175	4,400	185	4,300	186
3. Other Maint.						
and Support	1,017	49/93	1,370	56/101	1,169	56/101
(# ships/# craft)						
4. Property Disposal	64	60/2	75	60/9	75	60/9
(# ships/# craft)						

H. CG-47/DDG-51 MAINTENANCE SUPPORT

Provides AEGIS system maintenance support in the following areas:

- Planning Yard. The Navy has specified a sustained operational availability approaching 90% for the CG 47 Class. In order to achieve this availability goal, innovative maintenance planning and better execution are required to ensure that all maintenance/modernization requirements are accomplished during time-constrained availabilities. A primary goal of the CG 47 planning yard is to reduce the Regular Overhaul (ROH) period for CG 47 Class ships. The net effect of such a reduction could be an additional twenty-two years of ship operational availability over the life of the entire class. Due to higher than normal operational availability required of this class, the CG 47 Planning Yard responsibilities go well beyond those of a traditional planning yard in the areas of configuration engineering, maintenance/modernization material integration, operating cycle integration and quality control.

Activity Group: Maintenance Support (Cont'd)

III. Performance Criteria (Cont'd)

- Combat System In-Service Engineering. The uniqueness of the AEGIS combat system requires organic fleet maintenance support capabilities and experience to maintain a totally integrated combat system. In-Service Engineering (ISE) support is necessary to maintain the AEGIS Combat System at operational levels required by the CG-47 Engineered operating cycle. CG-47 - 51 are equipped with a SPY-1A radar MK26 Launcher, and a version of the production AEGIS Combat System. FY 1986 marks the fleet introduction of CG-52, the first AEGIS cruiser with significant combat system upgrades including the vertical launcher and a major ASW upgrade. In FY 1987 three additional cruisers of this type join the fleet, requiring expanded in-service engineering support to include both the Atlantic and Pacific Fleet units.

- Hull, Mechanical and Electrical (HM&E) In-Service Engineering. Much of the in-service engineering capabilities required to support the CG-47 class have already been put in place by the DD-963 class. This account supplements those in-place capabilities to cover: (1) differences between CG-47 and DD-963 HM&E equipment suits; and (2) the significant difference in programmed operational availability of the two classes: approaching 90% for CG-47 vice 60% for DD-963.

- Follow-on Test and Evaluation. Follow-on Test and Evaluation (FOT&E) is required with the introduction of combat system upgrades to verify and validate the capabilities and performance of combat system improvements. The first AEGIS ship with a vertical launcher, CG-52, will undergo this testing in FY 1986 and FY 1987.

- Depot Administration. Provides for the administration, warehousing, receiving, packaging and shipping of failed tubes which are repaired at the designated AEGIS repair depot in NSWC Crane, IN and restored to a Ready-For-Issue status.

- AEGIS Computer Center (ACC) Administration and Maintenance. Provides for the operation and maintenance of the ACC, Dahlgren, VA. Requirements are driven by computer system equipment repairs but also include site upkeep, security, utilities and general administration. This center directly supports in-service engineering and computer program maintenance functions of at-sea and shore site AEGIS Combat Systems.

- AEGIS Combat Systems Center (ACSC). The ACSC was established in accordance with Congressional direction to transition AEGIS training and Life Time Support Engineering functions from RCA, Moorestown, NJ to NSWC, Dahlgren and Wallops Island, VA respectively. This account provides for the activation, operation, and maintenance of the ACSC at NSWC, Wallops Island, VA. Operation and maintenance requirements are driven by combat system equipment repairs but also include equipment installation and check-out, site, upkeep, security, utilities, and general administration. FY 1986 and FY 1987 activation requirements are to install and check-out \$42.9M in FY 1984 equipment procurements supporting an ACSC operational date in FY 1986. FY 1987 funds also support initial ACSC operation.

Activity Group: Maintenance Support (Cont'd)

III. Performance Criteria (Cont'd)

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
Total Funding	\$7,256		\$30,607		\$37,281	
=====						
	\$	<u>FY 1985</u> Units	\$	<u>FY 1986</u> Units	\$	<u>FY 1987</u> Units
1. CG 47 Planning Yard/Avail	1,301	1	10,000	9	13,575	12
2. Combat System In-Service Engineering/Tech Assists	1,766	52	5,370	405	6,093	461
3. Ship Systems (HM&E) In-Service Engineering/Tech. Assists	1,700	55	2,042	172	2,573	167
4. Follow-On Test and Evaluation/Ship Days of Test Support	-	-	2,047	9	2,404	9
5. AEGIS Depot Admin Crane,IN	1,423	-	1,487	-	1,906	-
6. AEGIS Computer Center Admin* - Activation	1,066 -	- -	1,114 1,564	- -	2,955 -	- -
7. AEGIS Cmbt Sys. Center Ops & Maint* - Activation	- -	- -	3,498 3,485	- -	6,675 1,100	- -

\* 6 months in FY 1986.

I. AVIATION ASW MAINTENANCE SUPPORT

The mobile ASW Target Program provides training exercise capability for all torpedoes, fired actively or passively including Torpedo MK 48, sonars, sonobuoys, and Magnetic Anomaly Detection (MAD) equipped aircraft. The aviation maintenance program provides for direct maintenance support for fleet torpedo firings required for ASW fleet exercises. In addition, it provides for maintenance support for CV ASW Module.

Unless units are reflected below, they can be considered to be comprised of items and workyears and/or items of varying mix which do not lend themselves to average pricing from one year to the next due to changes in the mix of workload. Additional backup data will be provided upon request.

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1985</u> \$ Units	<u>FY 1986</u> \$ Units	<u>FY 1987</u> \$ Units
Total Funding	4,078	4,154	1,999
1. Target Spt	1,870	1,989	1,811
2. CV/ASW Module Support	2,208	2,165	188

J. NSSP MAINTENANCE SUPPORT

Provides for the centralized planning and programming of maintenance efforts for the lifetime of the Navy's Standard Signal Processors (NSSP): the AN/UYS-1 Advanced Signal Processor (ASP) and the AN/UYS-2 Enhanced Modular Signal Processor (EMSP). Efforts funded include the establishment of in-house engineering expertise; preparation, review, and revision of technical manuals; and support of integrated Logistics support and field engineering. Currently, the AN/UYS-1 is in service in 16 platforms and weapons systems, ground applications, and trainers. The AN/UYS-2 will begin fleet deliveries in FY 1987.

	<u>FY 1985</u> \$ Units	<u>FY 1986</u> \$ Units	<u>FY 1987</u> \$ Units
Total Funding	502	5,175	4,887
(No. of In-Service Systems)		464	635
Program Management	230	669	616
Engineering & Maint. Support	272	3,020	2,568
Operational & Logistics Support		969	918
Tech. Doc. & Engineering Data		517	785
(No. of Documents Maintained)		25	47

IV. Personnal Summary (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. Civilians	55	61	61
USDH	55	61	61

DEPARTMENT OF THE NAVY  
OPERATIONS & MAINTENANCE, NAVY  
Exhibit OP-05

Activity Group: Procurement Operations  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Sea Systems Command

I. Description of Operations Financed

Procurement operations provides for centralized procurement and contract administration services; and technical services in support of the design, acquisition, construction, overhaul, repair, and alteration of ships and shipboard weapons.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Project Management Offices						
Project Mgmt Offices	39,368	33,966	35,202	39,273	41,589	2,316
ASW Project Office						
ASW Project Office	1,983	2,651	2,698	0	0	0
Contract Administration						
AEGIS Ship Prcrmt Spt	4,633	6,021	5,984	5,846	6,196	350
NAVPROS	10,473	11,700	12,009	11,583	12,274	691
SUPSHIPS	155,578	152,055	155,416	156,662	155,344	-1,318
Shipbuilding Support Office						
Shpbldg Spt. Office	2,014	2,127	2,117	2,056	2,061	5
Theatre Nuc Warfare	0	0	0	1,029	2,474	1,445
TOTAL, PRCRMT OPS	214,049	208,520	213,426	216,449	219,938	3,489



Activity Group: Procurement Operations (cont'd)

B. <u>Reconciliation of Increases and Decreases</u>	Amount
1. FY 1986 Current Estimate	\$216,449
2. Pricing Adjustments	61
A. Industrial Fund Rates	(-11)
B. Average Grade Reduction	(-589)
C. Annualization of Civilian Health Benefits	(-148)
D. Other Pricing	(809)
3. Functional Transfers	1,280
A. Transfers-In	(1,280)
1) Inter-Appropriation	
a) PROJECT MANAGEMENT OFFICES	1,280
Nine workyears associated with the transfer from the Marine Corps of the Assault and Attack Vehicle Project Office (280). Funds for contract design related travel are transferred from the SCN appropriation (1,000).	
4. Program Increases	6,136
A. Other Program Growth in FY 1987	(6,136)
1) PROJECT MANAGEMENT OFFICES	2,445
Salary and benefit increases include one workyear for mine support (30), eight workyears for the Attack Submarine Project Office (360), and the annualization of 43 workyears for end strength added in FY 1986 (2,002). ADP maintenance increases to support purchases (53).	
2) CONTRACT ADMINISTRATION	
a) <u>AEGIS Ship Procurement Support</u>	136
Provide support to 2 additional ships under construction.	
b) <u>NAVPROS</u>	777
Increase supports 18 additional workyears (565) and related costs (212) for contract administration due to greater number of contracts and larger contract values in FY 1987.	
c) <u>SUPSHIPS</u>	1,327
Increased number of ship availabilities drives requirement for 32 additional workyears for contract administration (1,174). Increase also reflects efficiency review restoration of 4 workyears (153).	

Activity Group: Procurement Operations (cont'd)

B. <u>Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
3) SHIPBUILDING SUPPORT OFFICE	19
4) THEATRE NUCLEAR WARFARE	1,432
Initial funding is provided for required preparations for the EMPRESS II testing facility with initial operating capability scheduled for FY 1988. The Electro-magnetic Pulse Radiation Environmental Simulator will be used to test the Electromagnetic Pulse hardness of the fleet. This program will develop test plans for each ship class.	
5. Program Decreases	-3,988
A. Other Program Decreases in FY 1987	
1) Civilian Ceiling Waiver	-442
Savings attributable to more efficient and economical execution of workload experienced resulting from waiver of statutory end strength ceilings in FY 1985.	
2) PROJECT MANAGEMENT OFFICES	-1,338
Salaries and benefits decrease 13 workyears, achievable through economics and efficiencies (-638). ADP leases are expected to terminate in accordance with Congressional direction (-133), while ADP purchases decrease (-82). Less travel will be performed (-328). Other support costs also decline (-157).	
3) CONTRACT ADMINISTRATION	
a) SUPSHIPS	-2,208
Decrease results from reduced support efforts such as training, travel, systems analysis and programming, microfiche services and printing and reproduction.	
6. FY 1987 President's Budget Request	\$219,938

### III. Performance Criteria and Evaluation

#### A. PROJECT MANAGEMENT OFFICES

##### 1. Project Management Offices

Project Management Offices are responsible for integration and coordination of major ship and weapon system acquisition projects. Funding supports salaries, benefits, and administrative support costs for engineers and administrative personnel in these offices. ADP leases are expected to terminate in accordance with Congressional direction.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Total Funding	\$39,368	\$39,273	\$41,589
Workyears	795	805	853
=====			
Civilian			
Salaries	35,312	36,193	38,064
Travel*	1,612	1,349	2,057
Printing and			
Reproduction	27	71	62
Equipment			
Equipment/			
Furniture	610	143	103
ADP Purchase	412	321	252
ADP Lease**	309	128	0
ADP Maint.	82	191	252
Supplies	156	219	182
Purchased Services	678	526	494
Other	170	132	123

\* \$1,000 increase in FY 1987 is due to the functional transfer of contract design travel from SCN.

\*\* Includes maintenance in support of the lease.

##### 2. ASW Project Office

Anti-Submarine Warfare Project Office provided civilian salaries and administrative support to coordinate anti-submarine warfare programs.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Total Funding	\$1,983	\$ -0-	\$ -0-
=====			

Funds have been realigned to Operation Support -- Field, ASW Surface Ship Technical Support, and other Navy claimants.

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria (cont'd)

B. CONTRACT ADMINISTRATION

1. AEGIS Ship Procurement Support

AEGIS Ship Procurement Support provides unique on-site technical functions not provided by resident NAVPRO, SUPSHIP or Defense Contract Administration Service activities. Provision of technical representatives is in accordance with DOD Instruction 4105.64 which directs project managers to provide dedicated, technically oriented procurement representatives at prime contractor plants to perform quality assurance, system engineering, combat systems integration and testing. The AEGIS Ship Procurement Support line currently funds program manager representatives at four sites: RCA Moorestown, ISD Pascagoula, GD Pomona, and BIW Bath. Starting in 1986 program manager representatives are also supporting DDG-51 construction at Bath Iron Works. They have been a key ingredient in the success of AEGIS Ships for the past 15 years. These sites represent only a fraction of the twenty-two primary production locations that support the AEGIS shipbuilding program. Typical functions performed include:

- Manufacturing and production surveillance and problem resolution
- Point of contact for Government Furnished Equipment
- Production and Test Plan review and acceptance
- Engineering design review
- Test evaluation and quality assurance
- Administrative services
- Systems Integration and problem resolution
- Management of Navy owned combat systems sites

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Total Funding:	\$4,633	\$5,846	\$6,196
# ships under construction	15	17	19

=====

Project Manager's Technical Representatives for AEGIS contracts are at the following sites:

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
1. RCA, Moorestown, NJ	\$1,956	\$2,423	\$2,532
2. Ingalls Shipbldg, Pascagoula, MS	1,495	1,714	1,770
3. General Dynamics, Pomona, CA	238	271	337
4. Bath Iron Works Bath, ME*	944	1,438	1,557

\* Includes technical representatives for both CG-47 and DDG-51 Classes.

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria (cont'd)

2. Naval Plant Representative Office (NAVPRO)

The four NAVPROs (Great Neck, NY; Laurel, MD; Minneapolis, MN; Pomona, CA) administer Navy and other DOD contracts at weapon system manufacturers to ensure that private contractors conform to contractual requirements. Responsibilities are in areas of quality assurance, engineering, industrial management, logistics and production monitoring as well as all other areas of contract administration. Value of contracts administered by these four NAVPRO's will exceed \$13.9 billion in FY 1987.

	\$ <u>FY 1985</u>	\$ <u>FY 1986</u>	\$ <u>FY 1987</u>
	Units	Units	Units
Total Funding	10,473	11,583	12,274
Workyears	307	354	372
No. of Contracts			
Admin	12,304	15,826	18,199

3. Supervisors of Shipbuilding (SUPSHIPS)

Provides salaries and associated administrative support costs for 16 Supervisors of Shipbuilding, Conversion, and Repair (SUPSHIPS). SUPSHIPS are responsible for ensuring that private contractors meet government specifications in the construction, repair and alteration of Navy ships by administering Navy and other Defense Department contracts at assigned private sector shipyards. This includes administration of shipbuilding, design, conversion and facility contracts, procuring and administering overhauls, repairs, alterations and inactivations performed on Navy ships under Master Ship Repair Contracts. Funding also supports the Industrial Management Office, Philadelphia which provides contract administration for ship overhauls and repairs in private yards in the Philadelphia area.

	\$ <u>FY 1985</u>	\$ <u>FY 1986</u>	\$ <u>FY 1987</u>
	Units	Units	Units
Total Funding	155,578	156,662	155,344
Total Workyears	4,182	4,179	4,215

The significant driver of the workload is in ship repair vice new construction. Increased workyears for repair are predominantly in the areas of Selected Restricted Availabilities (SRA's) and Phased Maintenance Availabilities (PMA's). These are short, manpower intensive availabilities where industrial work is compressed into a short period of time.

The workload summary data are further detailed below. This data accounts for the total number of ships under construction either in an ongoing availability (execution) status or in a pre-availability (planning) status. Thus, the effort required for new work is compared to the effort required to continue ongoing construction and availabilities that cross fiscal years. Accordingly, the total number of availabilities and ships in construction in any particular fiscal year may differ from that indicated by other programs because of the duration of construction or availability.

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria (cont'd)

a. SUPSHIP Workload Summary

The total SUPSHIP workload is computed by profiling manpower requirements on an individual availability by availability basis (i.e., New Construction Post Shakedown Availability, Regular Overhaul, Selected Restricted Availability or Fixed Load). To compute SUPSHIP requirements, each availability type has a particular manpower profile summarized on a month by month basis. The Workload and Staffing Profile (WASP) system is complemented by the Workload Accounting System (WAS) which provides actual feedback data to the WASP. SUPSHIPS submit quarterly reports (starting in FY 1984) stating the actual manpower utilized for each availability. Based upon composite WAS inputs individual availability profiles may be modified (i.e. to reflect increased or decreased manpower requirements).

Workload requirements and staffing are calculated within the following categories:

1) New Construction (N/C) Pre-launch/Post-launch:

N/C pre-launch data reflects the cumulative number of hulls (units) and the SUPSHIP manpower to administer the contract for each of those hulls prior to ship launch. SUPSHIP manpower application begins with the start of construction (normally 12-24 months after contract award). The pre-launch period is generally more than half of the ship construction duration; however, SUPSHIP manpower application during this period is less intense than later in the construction phase. In this phase, SUPSHIP approves Engineering and Quality Assurance (QA) procedures, orders Government Furnished Material (GFM) and spare parts, consents to subcontracts and approves other company procedures and schedules. During the N/C post-launch period, which runs from launch until 4 months after ship delivery, SUPSHIP manpower requirements are proportionately very high. Efforts may involve ship testing, sea trials management, trial deficiency corrections, engineering changes, contract change negotiation, government furnished material ordering, spare parts management, etc.

2) Post Shakedown Availability (PSA) Planning/Execution:

The PSA planning phase covers the period from 6 months before PSA start to PSA start. The SUPSHIP provides technical and engineering guidance and plans the work package, orders material, and formalizes the work package into a contract. The execution phase runs from PSA start until 3 months after PSA completion. During the PSA availability the SUPSHIP performs the normal contract administration functions: quality assurance, test and trials management, engineering change administration, material and spare parts management, change order negotiation, etc.

3) Regular Overhaul (ROH) Planning/Execution:

The ROH planning phase runs from 18 months prior to overhaul start to the start of overhaul. During this time the SUPSHIP plans all alteration and repair work, orders all government furnished material, develops the solicitation package, and normally awards the contract. The overhaul execution phase commences at overhaul start and runs through the guarantee and contract closeout period (4 months after overhaul departure and ship completion). The typical contract administration functions (as mentioned in item 2 above) are performed during the ROH availability period.

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria and Evaluation (cont'd)

4) Selected Restricted Availability/Phased Maintenance Availability Planning/Execution:

The Selected Restricted Availability/Phased Maintenance Availability SRA/PMA planning phase runs from 12 months prior to availability start to availability start. The planning for an SRA is exactly the same as the planning for an ROH. The planning for PMA's is performed by the contractor with the SUPSHIP reviewing and approving the contractor's specification preparation work. The SUPSHIP also orders Government Furnished Material and negotiates all GFM change orders. The SRA/PMA execution phase runs from ship arrival until 3 months after availability completion. The contract administration functions performed are all similar to those performed to administer an overhaul.

5) Fixed Load:

Fixed load manpower is the number of people required to administer all Commercial Industrial Support (CIS) and Repair Availabilities and Technical Availabilities (RATA). CIS includes work performed by contractors that exceeds the local capacity/capability of ship's forces, tenders, repair ships, and Shore Intermediate Maintenance Activities (SIMA's). It consists of maintenance level work such as bilge/tank cleaning and repair or replacement of parts, components or assemblies removed from ships. RATA includes restricted availabilities and technical availabilities. Restricted availabilities are emergent unscheduled availabilities assigned for the accomplishment of specific items of work by an industrial activity with the ship present. During this availability the ship is rendered incapable of fully performing its assigned missions and tasks. Technical availabilities are unscheduled availabilities for the accomplishment of specific items of work by a repair activity during which the ship's ability to perform fully its assigned missions and tasks is not affected. For example, a ship needing one of its radios repaired can still be operational while that item is under repair at a contractor's facility. Additionally, numerous other amounts of manpower are included under this heading for planning shipyard execution, new construction configuration control, facilities administration, personnel administration, and memorials administration.

b. SUPSHIP Manpower Requirements (Manyyears) Summary Direct Funded Only

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
New Construction	1,722	1,711	1,711
PSA	200	200	200
ROH	725	683	653
SRA/PMA	892	1,091	1,120
Fixed Load	643	494	531
Total Manyears	<u>4,182</u>	<u>4,179</u>	<u>4,215</u>

c. SUPSHIP total requirements include the requirement for direct funded, reimbursable funded and FMS funded billets. Manpower requirements are increasing to plan and execute the short, intense SRA/PMA workload. The number of new starts for these availabilities increases from 85 in 1985 to 91 in FY 1986 and 129 in FY 1987.

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria and Evaluation (cont'd)

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	\$	Units*	\$	Units*	\$	Units*
c. Total Funding						
((\$000))	155,578		156,662		155,344	
1. New Const	64,067	105	64,231	140	63,054	142
Pre-Launch		81		83		66
Post-Launch		24		57		76
2. Post Shakedown						
Avail	7,437	10	7,504	44	7,379	67
Planning		6		28		33
Execution		4		16		34
3. Regular						
Ovrls	26,977	83	25,536	102	24,063	93
Planning		54		55		44
Execution		29		47		49
4. SRA/PMA	33,185	283	40,889	384	41,275	518
Planning		193		221		298
Execution		90		163		220
5. Fixed Load	23,912		18,502		19,573	

\* Units = number of hulls

D. SHIPBUILDING SUPPORT OFFICE

The NAVSEA Shipbuilding Support Office (NAVSHIPSO) supports the NAVSEA Acquisition and Logistics Directorate and all Ship Acquisition Project Managers (SHAPM's) by conducting advance planning, monitoring the delivery of shipbuilding components and materials, and assisting in the acquisition and major repair source selections. This office also maintains the Naval Vessel Register and the Ship's Data Book for the Department of the Navy. This is a two-volume publication which contains the names, characteristics, assignments and disposition of all the Ships and Service Craft in the Active Fleet, Reserve Fleet, Inactive Fleet, MSC and the U.S. Army vessels.

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	\$	Units	\$	Units	\$	Units
Total Funding	\$2,014		\$2,056		2,061	
Acq Asmt Spt						
(# of Studies)	1,896	607	1,928	581	1,935	554
Travels to spt						
source selections,						
etc. (# of trips)	98	161	106	160	104	150
Printed Reports	20	10	22	11	22	11



Activity Group: Procurement Operations (cont'd)

III. Performance Criteria and Evaluation (cont'd)

E. THEATRE NUCLEAR WARFARE

The Theatre Nuclear Warfare effort ensures an integrated and coordinated program for the acquisition and fleet support of theater nuclear weapons through centralized management of resources. The program also oversees hardening for combat effectiveness of weapons and systems exposed to nuclear environments. Support for the Electromagnetic Pulse Radiation Environmental Simulator for Ships (EMPRESS) II test facility begins in FY 1987. The EMPRESS II facility will be used to test the Electromagnetic Pulse hardness of the Fleet. Test plans for each ship class will be developed by this program.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Total Funding	*	\$1,029	\$2,474
	=====	=====	=====
Survivability	*	597	602
EMPRESS II	*	0	1,435
Weapons	*	70	72
Awareness and Training	*	35	36
Fleet Support	*	43	44
Program Support	*	284	285

\*Funded in NAVAIR, Theatre Nuclear Warfare.

IV. Personnel Summary (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>	<u>536</u>	<u>561</u>	<u>692</u>
Officer	404	428	429
Enlisted	132	133	263
B. <u>Civilian</u>	<u>5,356</u>	<u>5,536</u>	<u>5,557</u>
USDH	5,356	5,536	5,557

DEPARTMENT OF THE NAVY  
OPERATION & MAINTENANCE, NAVY  
Exhibit OP-05

Activity Group: Command and Administration  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Sea Systems Command

I. Description of Operations Financed

This program provides salaries and administrative support for NAVSEA headquarters personnel who provide technical direction and management for acquiring and supporting ships, weapons systems, and related equipment.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appro- priation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Command & Admin	36,607	32,392	32,128	32,703	30,866	-1,837
TOTAL, COMMAND & ADMIN	36,607	32,392	32,128	32,703	30,866	-1,837

Activity Group: Command and Administration (cont'd)

B. <u>Reconciliation of Increases and Decreases</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$32,703
2. Pricing Adjustments	27
A. Average Grade Reduction	(-96)
B. Annualization of Civilian Health Benefits	(-17)
C. Other Pricing	(140)
3. Program Increases	933
A. Annualization of FY 1986 Increases	(821)
1) COMMAND AND ADMINISTRATION	821
Increase of 21 workyears for end strength added in FY 1986.	
B. Other Program Growth in FY 1987	(112)
1) COMMAND AND ADMINISTRATION	112
ADP equipment purchases increase.	
4. Program Decreases	-2,797
A. Other Program Decreases in FY 1987	
1) COMMAND AND ADMINISTRATION	(-2,797)
Reduction of 40 workyears (-1,512) is associated with DON initiatives to streamline the organizational and program management structure at the Naval Material establishment. A further reduction (-16 workyears) is achievable through economies and efficiencies (-665). ADP leases are expected to terminate (-330). Less maintenance will be performed on Command-owned ADP equipment (-169). Other support costs will decline slightly (-121).	
5. FY 1987 President's Budget Request	\$30,866

Activity Group: Command and Administration (cont'd)

III. Performance Criteria

COMMAND AND ADMINISTRATION

This program provides salaries, benefits, and administrative support costs for Headquarters staff responsible for policy, planning, technical guidance, resource allocation, management and support of NAVSEA operations. ADP leases are expected to terminate in accordance with Congressional direction.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Total Funding	\$36,607	\$32,703	\$30,866
Workyears	813	732	697
=====			
Civilian			
Salaries	31,735	28,443	26,974
Travel	1,606	1,271	1,269
Printing and			
Reproduction	310	339	334
Equipment			
Furniture/Equip	196	134	137
ADP Purchase	247	221	341
ADP Lease*	960	317	0
ADP Maintenance	240	543	396
Supplies	352	366	347
Purchased Services	586	706	705
Other	375	363	363

\* Includes maintenance in support of the lease.

IV. Personnel Summary (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>	<u>38</u>	<u>41</u>	<u>38</u>
Officer	31	31	31
Enlisted	7	10	7
B. <u>Civilian</u>	<u>849</u>	<u>713</u>	<u>713</u>
USDH	849	713	713

DEPARTMENT OF THE NAVY  
OPERATION & MAINTENANCE, NAVY  
Exhibit OP-05

Activity Group: Field Operations  
Budget Activity: 7 Central Supply and Maintenance  
Claimant: Naval Sea Systems Command

I. Description of Operations Financed

Field operations provides the salaries and operating costs for a variety of support functions at Naval shore activities. Typical support functions include design and development of computer software for shore activities, engineering and administrative services for major weapons systems and shipboard equipment, and overhaul planning.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Operational Support-Field						
Oprtnl Support-Field	143,605	134,405	139,339	140,076	134,979	-5,097
NAVSEA Field Divisions						
NAVSEA Field Divisions	12,558	12,399	12,493	12,627	12,575	-52
Integrated Combat System						
Test Facilities						
ICSTF	3,411	3,889	3,897	3,603	4,685	1,082
PERA CV						
PERA CV	3,265	3,469	3,478	3,508	3,345	-163
PERA SS						
PERA SS	6,254	8,898	8,892	6,448	6,233	-215
PERA CRUDES/CSS/ASC						
PERA CRUDES	7,885	5,849	5,870	5,631	6,104	473
PERA CSS/ASC	<u>4,304</u>	<u>4,104</u>	<u>4,140</u>	<u>3,633</u>	<u>4,187</u>	<u>554</u>
TOTAL, FIELD OPERATIONS	181,282	173,013	178,109	175,526	172,108	-3,418

Activity Group: Field Operations (cont'd)

B. <u>Reconciliation of Increases and Decreases</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$175,526
2. Pricing Adjustments	468
A. Stock Fund (-3)	
1) Non-Fuel -3	
B. Industrial Fund Rates (48)	
C. Average Grade Reduction (-561)	
D. Annualization of Civilian Health Benefits (-97)	
E. Other Pricing (1,081)	
3. Functional Transfers -238	
A. Transfers-Out (-238)	
1) Intra Appropriation a) Transfer of SLUC reimbursable costs to Budget Activity 9, CNO.	
4. Program Increases 6,806	
A. Annualization of FY 1986 Increases (4,285)	
1) OPERATIONAL SUPPORT FIELD 4,285 98 workyears are added for end strength increase in FY 1986.	
B. Other Program Growth in FY 1987 (2,521)	
1) OPERATIONAL SUPPORT FIELD 389	
Personnel compensation increases include the addition of 1 workyear for the Radiological Affairs Support Office (RASO) (32) and other adjustments (31). ADP maintenance increases (260) to support equipment purchased in prior years. The Other portion of the program increases (66) to support renovation of the Naval exhibit at the Chicago Museum of Science and Industry.	
2) NAVSEA FIELD DIVISIONS 150 Increases in utilities, rents, and communication.	
3) INTEGRATED COMBAT SYSTEMS TEST FACILITIES 1,001 Combat system integration testing increases by 989 hours to support the CG 22, DDG 995 and DD 963 (710); 200,000 additional computer program instructions for the Standard Simulation System (291).	
4) PERA CV 78 2 workyear increase.	
5) PERA SS 48 2 workyear increase.	

Activity Group: Field Operations (cont'd)

B. <u>Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
6) PERA CRUDES/CSS/ASC	
a) <u>PERA CRUDES</u> 373 Increased operating costs (173) and support for long-range planning and engineering support for cruiser overhaul (200).	
b) <u>PERA CSS/ASC</u> 482 Increase for overhaul planning supports 12 additional availabilities including integrated logistics support, ship visits, pre-overhaul test and inspection plans, class work package definition, and other efforts. Increase for engineering support funds boiler improvement program, initiates heat stress shipboard improvement program, extends SHIPALT management to phased maintenance ships, and other efforts.	
4. Program Decreases -10,454	
A. Annualization of FY 1986 Decreases (-3,831)	
1) FY 1987 Management HQ Reduction -3,831 99 workyears.	
B. Other Program Decreases in FY 1987 (-6,623)	
1) Civilian Ceiling Waiver -142 Savings attributable to more efficient and economical execution of workload experienced resulting from waiver of statutory end strength ceilings in FY 1985.	
2) OPERATIONAL SUPPORT FIELD -5,488 Personnel compensation decreases include a reduction of 105 workyears achievable through economies and efficiencies (-4,605). ADP adjustments reflect a decrease in purchases and an attempt to purchase instead of lease equipment (-775). Remaining decreases are for the net reduction of 105 workyears (-108).	
3) NAVSEA FIELD DIVISIONS -259 Decreases in real property maintenance (-80); other purchased services (-179).	
4) PERA CV -339 Decrease in reimbursable efforts reduces Carrier Engineered Maintenance Program, which uses engineered maintenance strategies to reduce overhaul costs.	

Activity Group: Field Operations (cont'd)

B. <u>Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
5) PERA SS Reduction in submarine overhaul planning due to fewer availabilities. In addition, recent submarine inactivations have reduced the HM&E/ASW test requirements.	-395
5. FY 1987 President's Budget Request	\$172,108



Activity Group: Field Operations (cont'd)

III. Performance Criteria

A. OPERATIONAL SUPPORT-FIELD

The program provides basic salaries, benefits, and administrative support costs for personnel responsible for the management of ship and combat systems assigned to designated project management offices. Tasks performed include contract administration, material management coordination for ship and weapon system integration; acquisition policy and planning development; engineering and technical logistic support; and ship design and maintenance oversight. ADP leases are expected to terminate in accordance with Congressional direction.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Total Funding (\$000)	\$143,605	\$140,076	\$134,979
Workyears	3,115	3,020	2,915
=====			
Civilian Salaries	133,740	129,883	125,239
Travel	4,221	2,884	2,790
Printing and Reproduction	546	498	509
Equipment			
Furniture/Equip	346	401	393
ADP Purchase	493	1,307	848
ADP Lease*	650	254	0
ADP Maintenance	828	961	1,260
Supplies	595	733	710
Purchased Services	1,967	1,817	1,784
Other	219	1,338	1,446

\* Includes maintenance in support of the lease.

Effective FY 1986, Navy Leased Quarters, Beneficial Suggestion awards and the Ship Model Program are transferred to the Other portion of this program from the Other Support Program subactivity group.

B. NAVSEA FIELD DIVISIONS

Funds salaries and support costs of overhead personnel for the Naval Sea Support Centers and the Naval Sea Systems Command Logistics Support Engineering Activity (NAVSEALOGSUPENGACT). The Sea Centers provide technical services to the fleet, such as installation, support, operation, and maintenance of ship-board equipment and systems. NAVSEALOGSUPENGACT performs engineering and related functions associated with establishing and maintaining effective life-cycle supply support for hull, mechanical, electrical, and selected electronic equipments.

Activity Group: Field Operations (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1985</u>	<u>FY-1986</u>	<u>FY 1987</u>
Total Funding (\$000)	\$12,558	\$12,627	\$12,575
Total Workyears	272	284	284
=====			
SEACENS			
Civ. Personal Salaries	\$8,296	\$9,243	\$9,218
Other Purchased Services	962	800	645
Communications	579	602	626
Travel	550	350	356
Utilities and Rents	716	605	744
Supplies	406	408	424
Equipment	279	272	289
Transportation	0	0	0
Printing and Reproduction	80	83	86
Real Property Maintenance	690	264	187

C. INTEGRATED COMBAT SYSTEMS TEST FACILITIES

Provides support for Combat System Integration Testing (CSIT) and in-service engineering testing for multiple ship class combat systems computer programs.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	\$ <u>Units</u>	\$ <u>Units</u>	\$ <u>Units</u>
Total Funding (\$000)	3,411	3,603	4,685
Workyears	22	22	22
=====			

Efforts Funded

CSIT Labs Ops	2,664	2,941	3,713
Hours of Testing	5,644	6,115	7,104
Computer Program Support	747	662	972
# of Computer Program			
Instructions in 000s	338	320	520

D. PLANNING AND ENGINEERING FOR REPAIR AND ALTERATIONS (PERA) CV

Provides integrated planning for overhauls and for life cycle maintenance management of aircraft carriers. The primary functions of PERAs are long-range planning, engineering support, material support, standardization, and package integration.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	\$ <u>Units</u>	\$ <u>Units</u>	\$ <u>Units</u>
Total Funding (\$000)	3,265	3,508	3,345
=====			
Expense Operating Budget	2,157	1,848	1,980
Direct Funded Salaries			
and Benefits (non-add)	(902)	(683)	(761)
Workyears: Direct	25	20	22

### III. Performance Criteria (cont'd)

## E. PLANNING AND ENGINEERING FOR REPAIR AND ALTERATIONS (PERA) SS

	\$ <u>FY 1985</u> Units	\$ <u>FY 1986</u> Units	\$ <u>FY 1987</u> Units
Total Funding (\$000)	6,254	6,448	6,233
	=====	=====	=====
Expense Operating Budget	3,120	3,474	3,553
Direct Funded Salaries and Benefits (non-add)	(2,040)	(2,146)	(2,194)

Workyears: Direct	66	69	71
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**Efforts Funded:**

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
1. <u>Logistic and Other</u>	<u>871</u>		<u>947</u>		<u>990</u>	
<u>Technical Support</u>						
Gen. Logistic Spt.	340		424		375	
Ship Logistics Repts.		12		12		12
Flt. Mod. Prog. Repts.		12		12		12
Special Analyses		4		4		4
Info. Resource Mgmt.	438		500		600	
#ADP Sys Supported		15		16		17
Engineers in Training	93		0		10	
# of Engineers		4		0		2
Quick Action Program	0		23		5	
# of Technical Rpts.		0		4		1

Activity Group: Field Operations (cont'd)

III. Performance Criteria (cont'd)

	\$ <u>FY 1985</u> Units	\$ <u>FY 1986</u> Units	\$ <u>FY 1987</u> Units
2. <u>Mgmt &amp; Eng Spt.*</u>	<u>1,798</u>	<u>1,896</u>	<u>1,595</u>
Sub Ovhl Plng.	925	1,153	950
# Ovhl's Planned	42	44	40
# Availabilities Spt.	74	73	74
Standardized HM&E/ASW Tests	805	649	560
# Procedures Conducted	1,225	1,425	1,225
# Problems Resolved	1,400	1,600	1,376
Sub Silencing	68	94	85
Technical Assists	116	117	127
3. <u>Mgmt. Engineering Spt.</u>	<u>206</u>	<u>51</u>	<u>20</u>
for Sub Alt & Maint. Program			
Sub Mod. Planning	206	51	20
# of SHIPALTS in Adv. Mat. Ident. Program	20	20	20
# Forces Afloat SHIPALTS	21	8	20
4. <u>Material Program</u>	<u>259</u>	<u>80</u>	<u>75</u>
# of Components Provided	1,500	1,800	2,680

\* Logistics and planning for EOC availabilities and preparation of work packages is done in the PERA SS line vice BA 2.

F. PLANNING AND ENGINEERING FOR REPAIR AND ALTERATIONS (PERA) CRUDES

Provides integrated planning for overhauls and for life cycle maintenance management of cruisers and destroyers. The primary functions of PERAs are long-range planning, engineering support, material support, standardization, and package integration.

	\$ <u>FY 1985</u> Units	\$ <u>FY 1986</u> Units	\$ <u>FY 1987</u> Units
Total Funding (\$000)	7,885	5,631	6,104
Expense Operating Budget	3,792	4,389	4,608
Direct Funded Salaries and Benefits (non-add)	(1,908)	(2,369)	(2,361)
Work Years Direct	63	64	64
Efforts Funded:			
1. Program Support	1,874	1,242	1,496
2. Engineered Oper Cyc *	2,219	0	

\* This effort was transferred from BA-2 (DD-EOC program) in FY 85. Subsequently, this effort transferred to the Surface Ship Maintenance and Performance Monitoring Program (BA-2) effective FY 1986.

Activity Group: Field Operations (cont'd)

III. Performance Criteria (cont'd)

G. PLANNING AND ENGINEERING FOR REPAIR AND ALTERATIONS (PERA) CSS/ASC

Provides integrated planning for overhauls and for life cycle maintenance management of combat support ships and amphibious and service craft. The primary function of PERAs are long-range planning, engineering support, material support, standardization, and package integration.

	FY 1985 \$ Units	FY 1986 \$ Units	FY 1987 \$ Units
Total Funding (\$000)	4,304	3,633	4,187
=====			
Expense Operating Budget	2,523	2,159	2,245
Direct Funded Salaries and Benefits (non-add)	(1,540)	(1,076)	(1,128)
Work Years: Direct	46	35	37
<u>Efforts Funded:</u>			
1. Overhaul Planning	872	737	1,075
2. Engineering Support	280	230	300
3. ADP	228	200	220
4. Baseline Data and Mgmt	192	150	160
5. Service Craft Modernization Program	87	57	77
6. Test Program	122	100	110

IV. Personnel Summary (End Strength)

	FY 1985	FY 1986	FY 1987
A. <u>Military</u>	<u>679</u>	<u>713</u>	<u>725</u>
Officer	352	397	393
Enlisted	327	316	332
<u>Civilian</u>	<u>3,705</u>	<u>3,480</u>	<u>3,483</u>
USDH	3,705	3,480	3,483

DEPARTMENT OF THE NAVY  
OPERATION & MAINTENANCE, NAVY  
Exhibit OP-05

Activity Group: Logistics Support Activities  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Sea Systems Command

I. Description of Operations Financed

Programs included in this activity group provide support to fleet and shore station operations in such areas as:

- a. Technical documentation required for ship design and maintenance
- b. Ammunition movement, handling and disposal
- c. Safety of personnel and security of ships, shore stations, and sensitive weapons and material
- d. Equipment inventory control and accounting
- e. Management information systems and ADP support
- f. Underutilized capacity at ordnance stations
- g. Salvage operations and diving
- h. Inactivation of ships
- i. Other engineering and technical services in support of Fleet equipments, including surface missile systems and marine gas turbines.

Activity Group: Logistics Support Activities (cont'd)

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	FY 1985	Budget Request	FY 1986 Appro- priation	Current Estimate	FY 1987 Budget Request	Change
Surface Warfare Systems						
Qual Evaluation Prgm	13,810	20,830	20,760	18,739	18,903	164
Surf Warfare Journal	93	303	309	203	207	4
SMS Log & Tech Spt	4,396	5,723	5,703	4,639	4,893	254
Ammunition Systems						
RSS&I	63,288	61,277	61,177	70,642	71,949	1,307
Prpty Dspl of Ordnance	5,459	7,536	7,531	7,287	6,173	-1,114
Safety and Security						
Nuc Wps Sfty/Secur	6,492	6,210	6,207	5,854	5,287	-567
Safety-General	2,915	4,400	4,390	3,768	4,714	946
NAVOSH Program	2,373	2,374	2,364	2,020	1,498	-522
Radiation Cntrl & Hlth	699	724	724	700	556	-144
Sensitive Ordnance Sec	11,435	13,005	12,965	10,744	9,700	-1,044
Small Arms Management	2,147	2,607	2,597	2,516	2,651	135
Energy Conservation	484	609	609	591	554	-37
Ship Systems						
Ship Design Methodology	8,483	1,794	1,725	1,699	2,744	1,045
NAVSEA Material Spt	1,122	2,895	2,783	2,063	2,170	107
INSURV	1,875	1,177	1,202	1,167	1,998	831
3M Maint & Mtrl Mgmt	13,890	15,017	15,302	13,458	15,010	1,552
Fed/Mil Stnd & Specs	2,906	5,944	5,924	5,267	6,008	741
Marine Gas Turbines	10,044	15,203	14,202	13,658	13,487	-171
VAMOS	543	652	636	614	876	262
Acquisition and Logistics Support						
Acquisition Planning	1,854	2,405	2,382	1,891	2,386	495
Log Support Program	33,251	40,447	39,772	54,315	71,484	17,169
Ingtd Log Spt Tech Improv	1,383	2,186	2,110	1,579	2,154	575
Acquisition Strategy						
Standardization	175	408	416	255	327	72
Surface Ship Support						
FMP (SAMIS)	3,107	7,462	5,948	5,207	7,037	1,830
SNAP	13,201	13,585	13,419	11,867	8,479	-3,388
PHM Logistic Support	4,070	10,657	10,609	7,007	5,020	-1,987
Diving & Salvage						
Navv Diving Program	3,173	4,369	4,420	3,232	2,894	-338
Emergency Salvage	1,232	1,505	1,523	1,278	1,539	261
Inactivation of Ships						
Inactivation of Ships	5,522	62,184	61,954	53,833	72,722	18,889
Shipyard Modernization						
Shipyard Mod	8,982	42,257	14,318	14,121	10,541	-3,580
Other Support Prog Act	656	563	563	547	530	-17
Data Support						
Data Support	5,163	4,885	4,834	4,567	4,719	152
Underutilized Plant Capacity						
Underutilized Plnt Cap	103,118	100,199	100,199	100,187	100,976	789
TOTAL, LOG SPT SER	337,341	461,392	429,577	425,515	460,186	34,671

Activity Group: Logistics Support Activities (cont'd)

B. <u>Reconciliation of Increases and Decreases</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$425,515
2. Pricing Adjustments	12,823
A. Industrial Fund Rates (8,015)	(8,015)
B. Average Grade Reduction (-230)	(-230)
C. Annualization of Civilian Health Benefits (-3)	(-3)
D. Other Pricing (5,041)	(5,041)
3. Functional Transfers	-2,000
A. Transfers-Out (-2,000)	(-2,000)
1) Intra-Appropriation	
a) SHIPYARD MODERNIZATION	
i) <u>Shipyards Modernization</u>	-2,000
Decrease reflects transfer of funds supporting FAMI Training in BA-8.	
4. Program Increases	57,055
A. Other Program Growth in FY 1987 (57,055)	(57,055)
1) SURFACE WARFARE SYSTEMS	
a) <u>SMS Integrated Logistics</u>	2
2) <u>AMMUNITION SYSTEMS</u>	
a) <u>RSS&amp;I</u>	2,680
An additional 10 thousand short tons are planned for rollback and prepositioning efforts in FY 1987 (2,330); excess ammunition relocation funds increase to the level required to fully fund this effort (350).	
3) <u>SAFETY AND SECURITY</u>	
a) <u>Nuclear Weapons Safety/Security</u>	416
Increase represents funding for engineering Technical Assistance (200); increase of 3.3 manyear requirements for sensor maintenance (216).	
b) <u>Safety-General</u>	765
Increase of 8 systems tested for the Combat System Test Program (375); 27 systems analyzed for lithium battery explosive hazards (300); increased effort for explosive waivers and ordnance safety (80); other increases (10).	
c) <u>NAVOSH PROGRAM</u>	33
NAVOSH Ship Activity (33)	
4) <u>SHIP SYSTEMS</u>	
a) <u>Ship Design Methodology</u>	987
Increase in Automated Engineering Design (AED) support essential to ship design construction and maintenance to support an increase in the amount of users.	



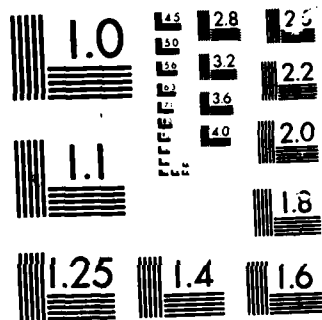
DEPARTMENT OF THE NAVY JUSTIFICATION OF ESTIMATES FOR  
FISCAL YEAR 1987 SU. (U) OFFICE OF THE COMPTROLLER  
(NAVY) WASHINGTON DC FEB 86

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**Nil**

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Activity Group: Logistics Support Activities (cont'd)

<u>B. Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
b) <u>NAVSEA Material Support</u>	189
Increase in material upkeep and strip ship program.	
c) <u>Inspection and Survey</u>	782
INSURV - additional funds will support 7 man-years of effort which equates to 3 months of support, i.e. providing NAVSEA personnel at the request of PREINSURV to serve as inspectors during INSURV Material Inspections (408). Fleet Baseline Studies - Funding will be provided for documentation of 77 Underway Material Inspections (374).	
d) <u>Maintenance and Material Management</u>	1,350
Increase maintenance data system support (MDS) for development, test and evaluation of ADP systems. Effort is largely related to SNAP computers. Funding will provide an additional 15 man-years of effort to collect information to be written up as software.	
e) <u>Federal/Military Standards and Specifications</u>	536
Increase in the preparation and update of Fed/Mil specifications and standards (293); 5 additional HM&E specifications will be standardized (185); and 4 additional Ship Survivability Design documents (58).	
f) <u>Visibility and Management of Operations and Support Costs</u>	246
Increase funds shipboard system reporting capability (146); and VAMOSC capability for Naval Reserve Ships (100).	
5) <u>ACQUISITION AND LOGISTICS SUPPORT</u>	
a) <u>Acquisition Planning</u>	447
Continues expansion development of Automated Logistics Information Analyses Systems (200); Increase level of effort for the Logistic Support Mobilization Plan (107); increased level of effort for acquisition policy and to implement the acquisition streamlining process (140).	
b) <u>Logistic Support Program</u>	19,821
Provisioning, Allowance and Fitting Out Support - an additional 2,640 (HM&E Critical Path to overhaul) equipments will be reprovisioned. Centralization and standardization of allowance equipment list development for new ship programs, production of maintenance support guidelines and revised Coordinated Shipboard Allowance Lists (COSAL), Structure for shipboard tracking to ensure CNO's goals for fitting out ships are achieved (2,571).	

Activity Group: Logistics Support Activities (cont'd)

B. Reconciliation of Increases and Decreases (cont'd) Amount

<p>Spare Parts Improvement Program - Provide 2,100 more full screen breakout reviews, complete 1,620 more acquisition method code (AMC) assignments and contractor technical information coding/AMC conferences, and provide 7 more technical data packages (13,544).</p> <p>Ship Equipment Configuration Accounting System - Increase by 20 the number of ship validations and expand validations to 80 shore activities. Increase effort for SNAP interface, and increase Automatic Data Processing (3,706).</p> <p>c) <u>Integrated Logistic Support Technical Improvement</u></p> <p>ILS for overhaul program will be implemented at SUPSHIPS (408); shipboard ILS audits will be expanded to cover all surface ship classes and several classes of submarines (132).</p> <p>6) <u>ACQUISITION STRATEGY</u></p> <p>a) <u>Standardization</u></p> <p>Completion of updating the standard component list and unsupportable equipment list.</p> <p>7) <u>SURFACE SHIP SUPPORT</u></p> <p>a) <u>Fleet Modernization Program Management Information System</u></p> <p>Funds additional field node installations (740); Navy Automated Regional Data Command (NARDAC) computer support increases as field node effort is completed and NARDAC assumes hardware and software maintenance (1,284).</p> <p>8) <u>DIVING AND SALVAGE</u></p> <p>a) <u>Navy Diving Program</u></p> <p>Recommencement of Faceplate magazine.</p> <p>b) <u>Emergency Salvage</u></p> <p>Increase will support 3 additional ship salvage operations.</p> <p>9) <u>INACTIVATION OF SHIPS</u></p> <p>a) <u>Inactivation of Ships</u></p> <p>SSN - one additional inactivation and one additional disposal (22,566). Surface - Increase results from the new policy which dictates that the Navy fully reimburse the Maritime Administration for temporary lay up costs (313).</p> <p>10) <u>SHIPYARD MODERNIZATION</u></p> <p>a) <u>Shipyard Modernization</u></p> <p>Increment due to Increase Depot Overhaul Improvement Program (179), industrial operation improvements (397), Test, Measurement, Diagnostic Equipment (245), asbestos litigation efforts (582), and Forces Afloat Maintenance Improvement (FAMI) evaluations of combat systems at intermediate maintenance activities (IMAs) (634).</p>	<p>540</p> <p>133</p> <p>2,024</p> <p>80</p> <p>220</p> <p>22,879</p> <p>2,037</p>
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Activity Group: Logistics Support Activities (cont'd)

B. <u>Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
11) DATA SUPPORT	
a) <u>Data Support</u> Increased software security features recommended by the Inspector General for SEAADSA (73) and other information support to meet requirements (33).	106
12) UNDERUTILIZED PLANT CAPACITY	
a) <u>Underutilized Plant Capacity</u> Based on projected workload at the Naval Ordnance activities, an increase in funding is required to maintain the planned baseline of 85% of the plant capacity to meet mobilization requirements.	782
5. Program Decreases	-33,207
A. One Time FY 1986 Costs	(-4,989)
1) LOGISTIC SUPPORT PROGRAM SECAS - lease of ADP equipment not repeated (-1,354). Integrated Logistics Overhaul - Completion of ILS to USS MIDWAY and provision of on-site Integrated Logistic Overhaul/Configuration Status Accounting Completed (-1,902).	-3,256
2) SURFACE SHIP SUPPORT a) <u>PHM Logistic Support</u> Decrease in material requirements corresponds with decrease in line item procurement.	-724
3) SHIPYARD MODERNIZATION Shipboard security efforts in shipyards.	-1,009
B. Other Program Decreases in FY 1987	(-28,218)
1) Civilian Ceiling Waiver Savings attributable to more efficient and economical execution of workload experienced resulting from waiver of statutory end strength ceilings in FY 1985.	-1,310
2) SURFACE WARFARE SYSTEMS	
a) <u>Quality Evaluation Program</u> Reduction reflects 9 fewer workyears for Conventional Weapons Evaluations cancelling ASROC evaluation and reducing Navy gun ammunition evaluation (-619); 3 fewer workyears for Ship Readiness Assessment cancelling CONAR inputs to the Readiness Improvement Program (RIP) analysis (-240).	-859
b) <u>Surface Warfare Journal</u>	-4

Activity Group: Logistics Support Activities (cont'd)

R. <u>Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
3) <u>AMMUNITION SYSTEMS</u>	
a) <u>RSS&amp;I</u> Decrease in RSS&I of one Near Term Prepositioning ship (-3,180). In addition, the current FY 1987 requirement decreases by 13 thousand short tons (-2,091). Decrease in funding for the Non-Nuclear Ammunition Inventory Accuracy Program (-150).	-5,421
b) <u>Property Disposal of Ordnance</u> Reduction represents reduced support for 13,800 line items for Disposal, Administration and Accounting (-583); 4 fewer workyears for disposal technical support (-350); 1,550 fewer short tons for Disposal, Demilitarization, and destruction (-166); 4.3 fewer workyears for Disposal Equipment installations (-386).	-1,485
4) <u>SAFETY AND SECURITY</u>	
a) <u>Nuclear Weapons Safety/Security</u> Fewer enhanced shipboard security units (-686); 2 fewer Ordnance Communication installations (-164); 1.6 fewer manyears for station improvements (-150); 10 fewer security vehicles leased (-48); 1 less security study (-75); other miscellaneous decreases (-160).	-1,283
b) <u>NAVOSH Program</u> NAVOSH Safety School - reduction of 30 lithium batteries analyzed (-309); 171 fewer people trained at the NAVSEA Safety School (-335).	-644
c) <u>Radiation Control and Health</u> Reflects reduced support for surveys and technical services.	-162
d) <u>Sensitive Ordnance Security</u> Decrease represents reduced Physical Security support of 30 workyears for guards.	-1,609
e) <u>Small Arms Management</u>	-2
f) <u>Energy Conservation</u>	-61
Decrease of 1 less Ship Energy Conservation Assist Team (SECAT) visit (-42); decrease effort in Ship Energy Conservation (-19).	
5) <u>SHIP SYSTEMS</u>	
a) <u>NAVSEA Material Support</u> Decrease HM&E data systems support program.	-103
b) <u>Maintenance and Material Management</u> Decrease will result in 200 Technical Feedback Reports not being answered.	-179

Activity Group: Logistics Support Activities (cont'd)

B. <u>Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
c) <u>Marine Gas Turbines</u> Decrease in technical support and life cycle engineering for the Diesel engines.	-511
6) <u>ACQUISITION LOGISTICS SUPPORT</u> a) <u>Logistic Support Program</u> SECAS - automation allows more efficient processing of technical support tasks (-733). ILO - completion of ILO responsibility for technical manual assistance (-955).	-1,688
7) <u>ACQUISITION STRATEGY</u> a) <u>Standardization</u> Complete effort to standardize overhaul procedures.	-68
8) <u>SURFACE SHIP SUPPORT</u> a) <u>Fleet Modernization Program Management Information System</u> Lease of ADP equipment in FY 1986 no longer required as field node installations complete.	-440
b) <u>SNAP</u> Decrease of field support (-297); maintenance support (-1,493); supply support (-1,550); and other logistic support (-453).	-3,793
c) <u>PHM Logistic Support</u> Decrease in materials management (-1,147) corresponds with fewer repairables processed and line items issued; decrease in engineering and technical support funds fewer technical support requisition completions (-366).	-1,513
9) <u>DIVING AND SALVAGE</u> a) <u>Navy Diving Program</u> Decrease in number of test dives and diving equipment system certifications (-260); unmanned dives in support of the fleet, field changes, and diver air purity sampling program (-94); and configuration management program (-30).	-384
10) <u>INACTIVATION OF SHIPS</u> a) <u>Inactivation of Ships</u> SSN - requirements for one less advance planning effort.	-3,674
11) <u>SHIPYARD MODERNIZATION</u> a) <u>Shipyard Modernization</u> Decrease results from reduced magnetic silencing (-2,324) industrial plant equipment (-104); and electrical cable investigation efforts (-319); drydock certification (-239).	-2,986
b) <u>Other Support Program</u>	-39

6. FY 1987 President's Budget Request

\$460,186

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria

A. SURFACE WARFARE SYSTEMS

1. Quality Evaluation

The quality evaluation program provides for quantitative test and evaluation appraisals of the safety, readiness, effectiveness, and shelf or service life characteristics of in-service expendable munitions. The results of the appraisals are provided to acquisition and in-service munitions program managers.

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	\$	WY	\$	WY	\$	WY
Total Funding	13,810		18,739		18,903	
=====						
Nuclear Weapons Eval (Workyears)	1,781	25	1,795	23	1,890	23
Conventional Weapons Eval (Workyears)	12,029	166	14,344	186	14,513	177
Ship Readiness Assess- ment	-		2,600	34	2,500	31

2. Surface Warfare Journal

Surface Warfare Journal is published to 350,000 officers and enlisted personnel of the Surface Warfare community to increase professionalism, improve readiness, and increase retention.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	\$/Units	\$/Units	\$/Units
Total Funding	93	203	207
=====			
Issues Published per year (50,000 copies per issue)	6	6	6



Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

3. Surface Missile System (SMS) Integrated Logistic Support

SMS Integrated Logistic Support provides logistics and technical support, assurance of quality instructions and availability of spares, supports data management, and installation and training equipment support of the Standard TERRIER, TARTAR, and surface missile systems in the Fleet.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding/WYs	4,396		4,639		4,893	
=====						
Op./ Tech.	3,172		3,689		3,891	
Logistics Spt.						
Data Req. Proc. & Design Disclosure (# of disclosure reports)	1,639	4,551	1,892	4,886	1,884	4,802
PMS Mat Control	121		141		168	
SMS 3M/DCAP & Material Spt. (# eng actions)	740	23,871	868	26,771	1,000	31,896
Documentation Spt. (# of documents reviewed)	672	429	788	481	839	512
Product Improvement (# eng action)	952	5,813	709	4,529	723	4,534
Test Equip. Log. Support	272		241		279	

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

B. AMMUNITION SYSTEMS

1. Receipt, Segregation, Storage, and Issue (RSS&I) of Ammunition

Provides personnel and material associated with the movement, handling, and storage of ammunition required to support Naval, Marine Corps, and Coast Guard forces. Regular RSS&I, provides for the loading and unloading of ammunition from fleet ships and for all other handling of ammunition associated with RSS&I. Program requirements are based on: Fleet operating schedules; ships entering and retiring from the Fleet, overhaul schedules; new weapon systems installed on ships; and stock adjustments.

In addition, funding provides for the inventory of non-nuclear ordnance, the rollback of excess and non-ready-for-issue stocks from storage outside of the continental United States and the prepositioning of war reserve and peacetime requirements to deployed fleet units or depots as well as for the relocation of excess explosive stocks at coastal weapons stations. Other efforts include the application of optical scanning technology for ammunition in the fleet and common service warehousing support of Air Force Cartridge and Propellant Actuated Devices.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	\$63,288		\$70,642		\$71,949	
No. of ship visits scheduled		1,323		1,341		1,382
=====						
1. Regular RSS&I	54,218	358	61,334	394	59,818	362
2. AE/AOE Homeporting	2,389	28	-	-		
3. Inventory	2,054		2,030		2,210	
4. Rollback/ Prepositioning Ammunition (Units = Number of short tons in 000's)	1,301	5	1,928	6	4,370	16
5. Excess Ammunition Relocation	1,087		998		1,407	
6. FOSAMS (Fleet OPSCAN)	1,560		3,213		3,240	
7. Intra-DOD Warehousing	679		989		904	
8. Non-Nuclear Ammunition Inventory Accuracy Prgrm	-		150		-	

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

2. Property Disposal of Ordnance

Supports personnel, materials, and facilities to make safe and dispose of ordnance which can no longer be maintained or has left the Navy inventory. These weapons and weapon components are then made available for: disposal, reuse, reclamation, or sale. (Revenues from sales are deposited in the general Treasury).

Unit cost varies from year to year due to the type of ordnance, condition, disposal process and mix of ammunition disposed.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	5,459		7,287		6,173	
=====						
1. Disp Admin accounting reporting, Receipt Inspec, Shipment, & Quality Assurance (No. of Line Items)	2,334	31,540	2,840	43,900	2,402	30,100
2. Disp Tech Spt, Demil Test & Eval, & Equip Maint (WY's)	1,962	31	1,256	17	970	13
3. Disp Demil, Dest, Declass, & Inert Ord Procs (Short Tons)	1,038	5,440	2,814	10,800	2,793	9,250
4. Disp Reclama- tions, & property sales (No. of Line Items)	4	56	10	142	8	96
5. Disp Equip Installation (WY's)	121	1.3	367	4.3	0	0

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

C. SAFETY AND SECURITY

1. Nuclear Weapons Safety and Security

The safety portion of the program provides for implementation of the DON Nuclear Weapons safety program and includes the distribution and control of technical publications and supporting in-service engineering functions related to nuclear safety. The security portion of the program provides for upgrading and hardening nuclear weapons-capable Navy activities, including maintenance of specialized security systems and sensors, upgrading ordnance communications, and leasing security vehicles. Shipboard security includes upgrading security alarm systems and improved tactical communications aboard nuclear capable ships.

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	\$	Units	\$	Units	\$	Units
Total Funding	6,492		5,854		5,287	
=====						
<u>SAFETY</u>						
1. Safety Studies/ (ea)	650	18	600	17	600	17
2. In-Serv Eng actions (ea)	1,500	782	1,500	780	1,500	780
3. Publications-Revisions/new docs. (ea.)	500	60	500	60	500	60
4. SUBROC SLEP (ea.)	300	40	300	40	300	40
5. Engineering Technical Assistance	0		0		200	
<u>SECURITY</u>						
1. Ordnance Communications Installations Completed (ea)	900	6	474	4	336	2
2. Shipboard Security (enhanced)	700	20	650	15	0	0
3. Sensor Maintenance (M/yrs)	800	14	850	14.7	1,091	18
4. Station Improvements (M/yrs)	500	6.5	550	6.8	430	5.2
5. Security Vehicles Leased (ea)	325	90	150	40	110	30
6. Security Studies/Evaluations (ea.)	317	4	280	3	220	2

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

2. Safety - General

Provides technical support for the Navy Explosives Safety Program including design and logistic management of explosive weapon systems. Also includes the Hero Retest Program to reevaluate current weapon systems to meet the latest technical standards and maintain combat capability of the fleet.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	2,915		3,768		4,714	
Weapons System	1,334	28	1,300	25	1,361	26
Explosive Safety						
Review Board						
(# of sytems						
analyzed)						
Combat Systems	0		0		375	8
Test Program						
(Sys tested)						
HERO and Hero	993	20	1,960	43	2,000	41
Retest Program						
(sys tested)						
Lithium Battery	0		0		300	27
Explosive						
Hazards						
(sys analyzed)						
Safety	488	6	408	5	488	6
Publications						
(# of)						
Naval Explosives	100	33	100	33	110	33
Safety						
Improvement						
Program						
(# analyses)						
Explosive					80	1
Waivers and						
Ordance Safety						
(WYs)						

3. Navy Occupational Safety and Health (NAVOSH)

Provides technical support for guidance and procedures regarding detection, evaluation, and control of workplace hazards such as asbestos, mercurv, work in confined spaces, lead and other hazardous material/processes. Correction of equipment and facilities deficiencies is included. Also provides for the operation and maintenance of the NAVSEA safety school curriculum, training modules, and career development programs.

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	2,373		2,020		1,498	
=====						
NAVOSH Technical Support/ # of Safety Investigations	451	10	448	10	499	11
NAVSEA Safety School/ # People Trained	1,522	920	1,217	762	939	591
Lithium batteries (Health Hazards)	400	42	355	36	60	6

4. Radiation Control and Health

The program directs the Navy-wide radiological control effort for personnel who handle, stow, or maintain Navy nuclear weapons.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	699		700		556	
=====						
1. Surveys and Tech Services	\$629		\$485		\$341	
2. Tech Assts, Training and Prog Spt	45		50		53	
3. Program Implementation	25		25		25	
4. Radiological Lab Services	0		140		137	

5. Sensitive Ordnance Security

Provides increased security, inventory procedures, and accountability of vital DON Conventional Arms, Ammunition and Explosives (AA&E). The program augments readiness, counteracts thefts, and improves security by directly supporting personnel engaged in asset inventory, surveying deficiencies, engineering cost effective designs and disseminating security standards to all Navy and Marine Corps activities ashore and afloat handling, storing or having custody of AA&E.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	11,435		10,744		9,700	
=====						
PHYSICAL SECURITY	7,794		7,816		6,643	
Guards Workyears		170		167		137
Security Vehicles leased		46		48		48

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Patrol Boats Spt		3		6		6
Navy Lockshop	153		157		157	
Surveys/Audits/ Inspections	645		471		500	
Shore		48		35		37
Ship		121		89		98
In-Service Eng.	280		287		297	
Ordinance Inventory	646		1,176		1,223	
Ammo Inventoried (Tons, 000s)		18		33		33
Inventory/Security Workyears	1,917	54	837	23	880	23

6. Small Arms Management

Provides centralized life cycle Navy program management for small arms, weapons, and mounts as well as combat equipment, 2,665 individual unit allowances for Navy Marine Corps Aviation, Coast Guard, and Military Sealift Command Organization.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	2,147		2,516		2,651	
=====						
Allowance						
Management	441	7.0	452	7.0	468	7.0
Serial Rpt for DOD Registry	519	7.4	531	7.4	551	7.4
In-Service Engineering Agent	441	7.0	452	7.0	468	7.0
Engineering Design Agent	355	4.9	365	4.9	379	4.9
Missing, Lost, Stolen or Recovered govt prop prog	391	5.3	598	9.3	620	8.9
Serialization, Screening, Segregation, Inventory of weapons in Depot storage	-	-	118	2	165	2.5
Seal Team Wpn Cert.	-	-	-	-		
Combat Readiness Review Team	-	-	-	-		
Small Arms Inventory (# in Thousands)		376		380		385

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

7. Energy Conservation

Program provides support for planning, coordinating and implementing the NAVSEA Energy Conservation (EC) Program. The program covers current and future ships and consists of two main efforts: A. Ship Energy Conservation Assist Team (SECAT) Visits during which the SECAT demonstrates to ships force energy conservation measures utilized in existing equipment. This effort has evolved into the Ship Energy Package Implementation Program (SEPIP) which combines SECAT with installation of stack gas analyzers and fuel meters and ship tracking. These additions will increase savings, ensure retention of savings and improve readiness through increase steaming hrs/qtr. B. Ship Energy Conservation supports issuance of energy conservation regulations, application of related R&D projects and expedited hull cleaning and coating.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	\$484		\$591		\$554	
A. SECAT Visits	384	6	509	8	489	7
Savings	46K	BBLs	56K	BBLs	56K	
B. Ship Energy Conservation	100		82		65	
Savings	19K	BBLs	19	K BBLs	19K	BBLs

\*BBLs = Barrels of oil saved

D. SHIP SYSTEMS

1. Ship Design Services

a. Ship Design Engineering Methodology - Develops and updates Navy unique ship design criteria and practices. Currently backlog is more than 150 practices requiring upgrading and is being addressed through this activity and direct in-house engineering. Also updates design synthesis models which provide the baseline data on ship performance and cost for all classes of ship design. Updated criteria make discrepancies between Navy and contractor estimates and designs readily identifiable. Design synthesis models increase the emphasis on performance/cost tradeoffs through all stages of design development.

b. Automated Engineering Data Support - Provides computer support to design engineers for automated calculations essential to ship design, construction, and maintenance. Computer programs, such as simulation models, are available and used extensively for solving the numerous "what if" questions ranging from structural and vibrational analysis of small foundations to hull definition and ship design weight estimates. Cost benefit ratios favoring automation are conservatively 100:1 for calculation, 3:1 for drafting and 20:1 for scientific data management. Cost avoidance for calculations alone is estimated at \$30 million or greater. Funds provide (1) service support for the in-house facility, (2) supplies and equipment maintenance for the in-house facility, and (3) remote facility computing time.



Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

c. Configuration control - Performed technical validation of total ship configuration baselines and life-cycle system and component changes to ship/ship class design and related logistic support.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	8,483		1,699		2,744	
=====						
a. Ship Design Engineering Methodology						
Practices backlog		159		152		137
Practices updated	149	2	789	12	823	13
Practices updated in-house		5		3		
Models updated	35	1				
Subtotal	\$184		\$789		\$823	
b. Automated Engineering Data Support						
In-House Computer Time Includes Support Service	\$1,189		\$735		\$1,190	
Remote Facility Computing Time	\$916		\$175		\$731	
Average # of Users		373		210		390
c. Configuration Control	\$6,194	*	0**		0**	

\* FY 1985 funding provides for 26 FFG-7 class ships.

\*\* Transferred in FY 1986 to Surface Combatant Tech Spt, and Combat Craft Support

2. NAVSEA Material Support

Maintains and monitors NAVSEA In-store (on the shelf) assets. Removes needed equipment from stricken or inactive ships and prepares it for shipment. Also provides a management information system to monitor program development. The program objective is to ensure that government furnished material which is in storage or on-board inactive ships is delivered on-time to meet contractual shipbuilding schedules to avoid costly delays and/or to establish accelerated ship overhaul schedules. The program has three main parts: (A) Material Upkeep, which seeks to preserve stored equipment from deterioration and thereby protect a \$161.4 million inventory; (B) Strip Ship, in which equipment needed for new construction or for overhauls is removed from stricken ships, thereby avoiding the cost of new equipment procurement; and, (C) Data Systems Support, which procures data processing from the Naval Regional Data Automation Centers in support of Hull, Mechanical and Electrical related tasks such as definition and monitoring of the billion dollar acquisition of 2S, 2F, and 2J cog equipment.

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	1,122		2,063		2,170	
Material Upkeep	784		1,008		1,151	
Pieces of equip preserved 1/		225		318		210
Strip Ship Program 1/	338		415		461	
DDG-33 (Ex-Parsons)		34				
DD-945 (Ex-Hull)		26				
APA-180 (Ex-Lavaca)				31		
LPA-226 (Ex-Rawlins)				31		
LPA-164 (Ex-Edgecombe)				31		
CG-11 (Ex-Chicago)				32		
MSO 440, 464, 509 and AH-17						142
HM&E Data Systems Support	0		640		558	

1/ Variations in the unit cost are the result of: Activity location, variations of man-day rates, types of equipment being preserved/stripped i.e., Gun Fire Control System versus Gun Barrels and type of preservation/strip required.

3. Inspection and Survey (INSURV) Material Inspections

Provides skilled technicians to support the work of the President of the Board of Inspection and Survey (PRESINSURV). The Material Inspections (MI) of ships of the active fleet conducted by INSURV gives the Chief of Naval Operations an impartial factual report of the material condition of each ship on a triennial basis. These survey reports highlight any condition which degrades the ship's capability to perform its mission or which indicates that the ship is not being properly maintained. A useful by-product of the Material Inspection is the detailed information on individual system/equipment deficiencies, which is used in planning corrective maintenance.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	1,875		1,167		1,998	
INSURV MI's	1,354		1,033		1,482	
INSURV Baseline Doc.	94	11	116	12	115	12
UMI Documentation	427	80	18	3	401	80

In addition to material inspections, fleet baseline studies of systems/equipment problems on specified ship classes are conducted and combat system test requirements are developed for Triennial underway material inspections. These are also initiated by PRESINSURV.

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

4. Maintenance and Material Management (3M)

The program is comprised of the following Fleet support efforts: (A) Planned Maintenance System (PMS) provides each ship with the maintenance procedures required to maintain ship reliability; updates each ship's procedures twice a year; and provides replacements upon request. (B) SNAP Data Base Program, provides and maintains configuration data bases for SNAP I and II installations; (C) Maintenance Data System (MDS), provides data that is used by SYSCOMS and the Fleet to plan for maintenance needs and Fleet improvements; (D) Navy Oil Analysis Program (NOAP), provides analysis of machinery lube oil to predict repair needs; and (E) Surface Ship Machinery Condition Assessment (SSMCA) whose objective is to eliminate unnecessary overhaul of machinery by recommending repairs based on machine condition in lieu of elapsed time.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Total Funding	<u>13,890</u>	<u>13,458</u>	<u>15,010</u>
	=====	=====	=====

A detailed description of the four elements of the program follows:

a. Planned Maintenance System (PMS)

PMS Library funding provides for updates of maintenance procedures to 2300 Fleet and Shore Activities. It also provides maintenance procedures upon request. PMS Documentation Maintenance provides for revision/update of maintenance documents; for answering complex and routine technical feedback reports related to Hull, Mechanical and Electrical (HM&E) systems; and for processing other feedback reports. Reliability Centered Maintenance (RCM) is an effort to redevelop PMS documentation. PMS documentation developed under the RCM methodology results in a system approach versus an equipment approach to maintenance. Previously implemented on FFG-7, DD-963 and FF-1052 classes and on new construction ships. It has been proven by INSURV that performance of PMS requirements improves Fleet readiness. RCM effort reduces manhour requirements of PMS without adversely affecting readiness.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
PMS Library	<u>2,500</u>	<u>2,600</u>	<u>2,600</u>
PMS Documentation Maint.	6,300	6,135	6,135
Reliability Centered Maintenance (RCM)	300	300	300
Total	<u>9,100</u>	<u>9,035</u>	<u>9,035</u>

b. SNAP Data Base

Provides for initial development of ships' SNAP I and II logistic data base (Scheduled to complete in FY 1988). Also provides for initial development of data files which handle configuration changes of logistic data in a mechanized format. This latter effort is required to allow ships with SNAP I and II systems to accomplish automatic update related to configuration change. Reduces shipboard administration workload and improves quality of data used in identifying problems in equipment reliability and logistic support.

Data Base Development	500	200	200
Data Base Maint	-0-	192	192
Total	<u>500</u>	<u>392</u>	<u>392</u>

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

c. Maintenance Data System (MDS)

Provides for collection of maintenance records from the Fleet and establishment of data bases for use of the Fleet and SYSCOMs. Data obtained from MDS system is used to plan for maintenance needs and Fleet improvements. Also included in MDS is an effort to upgrade maintenance management in the Fleet and at Shore activities (MDS II). Included in MDS II is the effort to coordinate current ADP maintenance systems, using SNAP computers, into one central maintenance system at the organizational and intermediate levels, to support TYCOM maintenance management and to provide an improved interface with depot maintenance. This will improve reliability, maintainability and logistic support of fleet equipment, which impacts the operational readiness of the ship.

	FY 1985	FY 1986	FY 1987
MDS I	1,770	1,700	2,142
MDS II	1,594	1,431	2,441
Total	3,364	3,131	4,583

d. Navy Oil Analysis Program (NOAP)

Minimizes need for periodic maintenance and improves machine availability onboard ships.

NOAP	926	900	1,000
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5. Federal/Military Specs/Std's

There are three main parts to the program:

Prepare, Update F/M Spec/Std's - Prepare and update Federal and Military Specifications and Standards needed for ship equipment acquisition, maintenance, repair and overhaul.

Federal/Military Specs/Std's (HM&E Standardization) - Develop standard specifications that will enable any procurement activity to acquire a standard unit or piece parts support. The objective of this effort is to increase Fleet readiness by minimizing the diversity of HM&E equipment and systems and their supporting documentation.

Federal/Military Specs/Std's (Ship Survivability Design) - Survivability design documents for nuclear effects, non-nuclear effects and susceptibility require upgrading to implement substantially changed policy and more stringent hardening requirements. The current survivability design documentation reflects World War II "Lessons Learned" and does not adequately account for current/postulated threats or advanced technology that has evolved in recent years.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Funding Total	2,906		5,267		6,008	
Update Specs and Std's	2,906	1820	2,844	1745	3,244	1,800
Standardize Specs			1,844	2	2,103	7
Survivability Doc. Update			579	3	661	7

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

6. Marine Gas Turbine

In FY 1987, 137 U.S. Navy combatant ships will use 612 Marine Gas Turbines (MGTs) for propulsion or electrical power generation. The maintenance philosophy established for these high cost end items consistent with the concept of minimum on board maintenance by shipboard personnel, is to generally limit on board repairs to removal and replacement of readily accessible external components/accessories. Engines requiring major repairs are removed and returned to a depot maintenance activity. In the case of the LM2500 gas generator the current cost of a depot repair averages \$400 thousand.

Accordingly, the effort is generally focused on maintaining a high level of operational availability and minimizing repair costs by accomplishing repair on board ship to the maximum extent possible. This is accomplished by providing a support system which includes assistance in resolving emerging material/maintenance problems through engineering investigations and material improvements and on board support from both in-house and manufacturer personnel to assist the fleet in repair actions. This includes the development of unique on board repair procedures utilizing special tools by off ship personnel and scheduling the accomplishment of these repairs on a case-by-case basis. This is particularly important as the mean age (operating hours) and total number and types of engines/control systems increases. This is accomplished by maintaining an engineering data system which includes reliability and maintainability data as well as detailed configuration status of each engine/control system. In addition, life cycle engineering and technical support services are provided for selected diesel engines (i.e., Fairbanks Morse and Detroit Diesel Allison 71 Series).

The following table displays some of the measurement parameters for both supporting the requirement for an increasing level of support and measuring the results. Of particular note is the cost avoidance resulting from the unique on board repairs, in lieu of removal for depot repair.

	FY 1985 \$ Units	FY 1986 \$ Units	FY 1987 \$ Units
Total Funding (000)	10,044	13,658	13,487
-----			
Total Diesel Funding	1,042	1,314	790
Total MGT Funding	9,002	12,344	12,697
MGT Engines Supported	488	553	612
MGT Types Requiring Support	4	6	6
MGT Types Requiring Organic Depot Capability	2	2	4
Failed MGT Material Engineering Invest.	80	75	80
Maintenance Procedure/ Material Improvements	180	180	180
On Board Repairs in lieu of MGT Removals to the Depot*	114	* 120	* 123

\* \$372 thousand Cost avoidance per removal

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Cost Avoidance Resulting from Unique On Board Repairs	\$52M	\$45M	\$46M
Number of Diesel Casualty Reports	75	65	60

If the repairs are not done on board, but at the depot, the additional requirement to NAVSEA refit and restoration line would be as indicated above in the cost avoidance line. Furthermore, the supply of spare engines will be quickly exhausted because repair requirements will exceed depot repair capacities.

7. Visibility and Management of Operations and Support Costs (VAMOSC-Ships)

VAMOSC-SHIPS is a Department of the Navy management information system which provides for the collection and display of annual operating and support (O&S) cost and related data for active fleet ships. It is the Navy's single source which provides the full range of this data within an approved data element structure. VAMOSC-SHIPS data on actual (vice planned/budgeted) O&S costs are a valuable resource for a wide range of analytical and decision-making purposes. These include DSARC and DNSARC deliberations concerning new system acquisitions where support issues play a vital part and influence decisions affecting the composition or force structure of the fleet. Also included are studies and analyses aimed toward obtaining more value (e.g. readiness) per logistic dollar spent, better logistics support for deployed systems (sustainability), life cycle cost estimating, development of Integrated Logistic Support plans, and trade-off analyses of reliability improvements vs. life cycle costs. VAMOSC-SHIPS reporting capability is being expanded to include O&S cost and related data at the shipboard system level and for Naval Reserve ships as required by OSD, ASSTSECNAV, CNO and other users. VAMOSC-Ships collects data from many data sources Navy-wide, and currently produces two standard annual reports of ship level O&S costs, one annual report on maintenance data for some 14,000 shipboard equipment items, and numerous special on-demand reports for users of the data.

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	\$	WY	\$	WY	\$	WY
Total Funding	543	9.0	614	10.1	876	13.6
Management Support	332	5.6	334	5.7	440	7.2
Data Sources Support	50	.5	79	.9	130	1.3
Systems Operation	56	1.1	60	1.1	75	1.3
Total System Design						
Spt	105	1.8	121	2.1	145	2.4
Product Improvement	-	-	20	.3	86	1.4

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

E. ACQUISITION AND LOGISTICS SUPPORT

1. Acquisition Planning

Provides the following: the establishment and maintenance of a ship acquisition data base; studies and reports related to ship acquisition planning; and the continued study of ways to improve specifications and planning in major systems acquisition and ship construction projects, mobilization planning; Commanders Development program and NAVSEA Institute.

Total Funding	<u>FY 1985</u> <u>\$1,854</u>	<u>FY 1986</u> <u>\$1,891</u>	<u>FY 1987</u> <u>2,386</u>
ALIAS Dev. Proj.	312	294	478
Test & Eval. Rev.	223	219	236
Shipbuilding Prgm.	131	74	115
Acq. Policy	135	119	214
Mobilization Plng.	205	191	321
Nav. Mat. Data Sys.			
Gr. Spt.	162	211	222
CDP	420	533	540
NAVSEA Inst.	266	250	260

a. ALIAS Development Project

(WY)	<u>\$312</u>	2.8	<u>\$294</u>	2.6	<u>\$478</u>	4.2
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Provides for development and maintenance of an automated directorate decision support system - Acquisition and Logistics Information Analysis System (ALIAS) - (including engineering, modeling, administrative, analytical, and communication tools). The system is designed to support the oversight, appraisal, and monitoring functions relative to acquisition, logistics and industrial base planning, with a design philosophy emphasizing long term modular growth and expandability, specialized and packaged software, and extensive communications via local and wide-area networks.

	<u>FY 1985</u> <u>\$ Units</u>	<u>FY 1986</u> <u>\$ Units</u>	<u>FY 1987</u> <u>\$ Units</u>
1. Systems Analysis & programming	\$304	\$284	\$466
2. Maintenance and other operating costs	8	10	12
b. <u>Test and Eval. Reviews</u>	<u>\$223</u>	<u>\$219</u>	<u>\$236</u>
1. Temp & Reviews	56	55	58
2. test report reviews	62	60	65

Provides engineering support for reviews of each acquisition program's Test and Evaluation Master Plan, (TEMP) and for prior to certification of a system's readiness for operational evaluation (OPEVAL) and approval of start of production.

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

	FY 1985 \$ Units		FY 1986 \$ Units		FY 1987 \$ Units
c. <u>Maritime Affairs</u>	<u>\$131</u>	1.6	<u>\$74</u>	1.0	<u>\$115</u> 1.4

Provides support services for COMNAVSEA and an Annual Report on Status of Shipbuilding and Ship repair Industry in the United States. Support Services include mobilization planning for U.S. Shipyards.

d. <u>Acq. Policy</u>	<u>\$135</u>	1.5	<u>\$119</u>	1.2	<u>\$214</u> 2.4
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Provides for development of acquisition policies and procedures, including those associated with Configuration Management, to involve Expanded Ship Work Breakdown Structure (EWBS). EWBS needs standard coding of Documents and proper training for persons preparing ship configuration drawings.

1. Acq. Policies	\$60		\$50		\$90
2. ESWS	0		0		83
3. Configuration Mgmt	75		69		41

e. <u>Mobilization Planning</u>	<u>\$205</u>		<u>\$191</u>		<u>\$321</u>
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The mobilization process encompasses all activities necessary to move systematically and selectively from a normal state of peacetime preparedness to a warfighting posture. It includes phased incremental options both for deterring war and for enhancing force readiness, deployment, or sustainability should deterrence fail. The complexity and magnitude of the mobilization process makes sound planning essential for successful implementation. This program provides for the systematic execution of NAVSEA mobilization related programs and involves an analysis of major JCS/Navy Planning Documents and Fleet Operation Plan (OPLAN's), Logistic Support and Mobilization Plans. It also provides analysis of related industrial mobilization plans to determine adequate levels of logistic support and to evaluate the ability to meet these requirements.

f. <u>Naval Material Data Systems Group Spt</u>	<u>\$162</u>		<u>\$211</u>		<u>\$222</u>
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Program provides support for a facility which includes the following functions: (1) a comprehensive communications capability; (2) approximately 2500 cubic feet of files and records; (3) office spaces and supplies to accommodate approximately 300 people; and (4) an emergency first-aid area.

g. <u>Commanders Development Program (CDP)</u> (# of Students)	<u>\$420</u>	30	<u>\$533</u>	30	<u>\$540</u> 33
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The CDP was established to help fulfill NAVSEA's need to develop personnel to fill key positions. The CDP is based on selecting 10 participants each year for a three year program including planned rotational assignments coupled with special development courses.



Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
h. <u>NAVSEA Institute</u> <u>(NI)</u>	<u>\$266</u>	<u>\$250</u>	<u>\$260</u>

The NAVSEA Institute was established to provide special development accredited courses, not usually available locally, that are directed toward meeting mission needs and given at a location and after hours time convenient to NAVSEA employees. The Institute provides approximately 36 courses per year and serves approximately 700 students per year. Courses are primarily geared to Naval Architecture, Marine Engineering, Combat Systems, Computer Science, Operations Research, and Ship Acquisition/Logistics Support.

2. Logistic Support Program (LSP)

The programs that comprise the LSP are: Provisioning, Allowance and Fitting Out Support (PAFOS); Spare Parts Improvement Program (SPIP). (SECAS)/Configuration Status Accounting (CSA); Integrated Logistics Overhaul (ILO); PAFOS and Outfitting Support determine the requirements for spare parts and spares necessary for maintenance throughout the ship's life cycle, and establish budget, management and control procedures to ensure that the requirements are valid, and that once budgeted, the funds are properly utilized. Spare Parts Breakout is in response to the DOD direction to increase competitive procurement for Navy spare parts. The SECAS/CSA and ILO efforts collect, process, and distribute the configuration status data for each ship and activity, and identify the logistics support documentation and materials required to be loaded aboard ships after each overhaul, availability, or conversion. SECAS/CSA and ILO efforts are interrelated and must be performed in tandem to improve overall fleet material readiness. The three data systems PAFOS, SECAS/CSA and ILO provide the interface between the fleet and the logistics support systems, ensuring that proper outfitting materials are provided to the fleet.

	<u>FY 1985</u>	<u>FY-1986</u>	<u>FY 1987</u>
	<u>\$</u> <u>Units</u>	<u>\$</u> <u>Units</u>	<u>\$</u> <u>Units</u>
Total Funding	33,251	54,315	71,484
=====	=====	=====	=====
PAFOS	2,097	3,496	6,413
SPIP	12,432	30,647	46,042
SECAS	16,128	15,848	17,490
ILO	2,594	4,324	1,539

a. Provisioning, Allowance and Fitting Out Support (PAFOS) Program: Determines the Navy's requirements for spare parts and spares to maintain the ship system or equipment for its life-cycle. Provisioning is the bridge between the acquisition manager's support requirements and the supply system's ability to fill those needs. It provides the data to support an equipment or weapons system's corrective and preventive maintenance, repair and overhaul requirements. The Fitting-Out Program provides a complete equipment configuration baseline for new construction ships, monitors provisioning progress, and provides new-construction on-site program assistance and assessment. Current projects include: Weapon System Mission Criticality coding and application during ship design; improvement of technical data requirements to meet the DOD's breakout and competitive acquisition program; and tracking and certification of configuration management. An increase in services is planned for FY 1986 and FY 1987.

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

	FY 1985 \$ Units	FY 1986 \$ Units	FY 1987 \$ Units
<u>PAFOS Funding Total</u>	<u>2,097</u>	<u>3,496</u>	<u>6,413</u>
Provision Planning/ Execution	1,576	2,606	5,063
Outfitting Management	390	660	1,120
Initial Supply Support Plans/ Executions	131	230	230

b. Spare Parts Improvement Program (SPIP) Implements the SECDEF direction to improve spare parts acquisition through competition. Breakout reviews, engineering and economic evaluations of technical data, are performed to determine competition feasibility of sole source acquisition of stock line items.

In addition, new line items are reviewed during the provisioning cycle using Contractor Technical Information Coding (CTIC), Provisioning Technical Documentation (PTD) and manufacturing plant surveys are conducted during Acquisition Method Code (AMC) Conferences. Once a new item is coded for competition, the technical data necessary to compete the procurement is purchased, or proprietary rights challenged where appropriate, and the competitive procurement specification is developed by the life cycle management engineers. NAVSEA engineering evaluation and central SPIP planning and control are essential to ensure quality and accuracy of spare parts acquisition. Through FY 1984, this program has resulted in cost avoidance/savings of greater than \$200M projected through 1991. This number will increase as program elements evolve further.

	FY 1985 \$ Units	FY 1986 \$ Units	FY 1987 \$ Units
<u>TOTAL SPIP Funding</u>	<u>12,432</u>	<u>30,647</u>	<u>46,042</u>
Full Screen Breakout Reviews	11,543	26,573	39,320
(Units are breakout reviews)	3,400	6,300	8,400
PTD AMC Assignment	2	583	842
(Units are # of AMC Assignments)	720	15,880	17,500
CTIC/AMC Conferences	887	1,592	3,095
(CTIC packages Procures)	-	20	44
(AMC Conferences Conducted)	4	17	40

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

Tech. Data	-	1,499	2,385	
Acquisition* (data packages)	-	18	25	
Engineering Review of Restrictive Markings (# of Reviews)	-	400	400	4

\*Full production technical data is essential for competitive procurement. Technical data of competitive quality ranges in price from \$10,000 for a single drawing to over \$500,000 for complex components. Data costs for items developed at contractor expense are very high.

c. Ship Equipment Configuration Accounting System (SECAS)/Configuration Status Accounting (CSA) Program: Maintains the Navy's central configuration status accounting system to satisfy all Navy managers' requirements for CSA data. Configuration defines exactly what Weapon's Systems are located where on a ship or shore site. SECAS uses change reporting system (shared with 3-M system), on-site validations and shipyard reporting of overhaul changes to obtain data. Data from this central system is required for 60 functions performed by Navy operations, maintenance and logistics support managers. Several initiatives are underway to improve accuracy of the CSA system and to be able to handle increased workload of a larger Navy. Beginning in FY 1987 SECAS program will be expanded to include all shorebased equipments. SECAS is the core program which directly controls logistics maintenance of the Fleet.

	FY 1985 \$ Units	FY 1986 \$ Units	FY 1987 \$ Units
<u>Total SECAS Funding</u>	<u>16,128</u>	<u>15,848</u>	<u>17,490</u>
Validations	4,507	2,880	5,987
# Ships	95	45	65
# Shore Act	-	-	80
File & Maint/ Quality Control of Config File	3,703	4,717	4,500
Ship Forms	90K	140K	181K
Shore Forms	-	-	40K
# Config Chges	425K	442K	510K
Reports	146	167	200
Ship	25.5K	30K	30K
Shore	-	-	4.7K
ADP Analyses/ Key Entry	1,656	1,421	1,800
Equipment Lease	-	1,354	-
Technical Spt/ # Tasks	2,430	2,983	2,259
SNAP Interface	2,344	2,326	2,744
ILO CSA on Site	1,342	-	-
Assist/# Ships	80	-	-

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

d. Integrated Logistics Overhaul Program (ILO): Works closely with the SECAS Program to maintain proper documentation reflecting all Navy ships true configuration. ILO maintains manuals on procedures for ship personnel to keep configuration data up to date. Data processing produces bills of material and parts listing that help define configuration. Planned maintenance system produces documents and listings of spare parts needed, and aids in the loading of these.

<u>Total ILO Funding</u>	<u>\$2,594</u>		<u>\$4,324</u>		<u>\$1,539</u>	
Procedures/Manuals	690		692		706	
New		6		-		-
Revised		-		15		10
ILO ADP/# lines of code	687	120K	425	80K	463	80K
Planned Maint. System (PMS)/ # of ships	317	160	365	160	370	160
On Site Tech Manual Assist/ # of ships	900	80	940	83	-	-
ILO CSA On-Site Asst.	-	-	1,532	158	-	-
USS MIDWAY ILO	-	-	370	-	-	-

3. ILSTIP

ILSTIP - Provides for the development of improved policies and procedures for the maintenance support of ships, ships' systems, combat systems and other equipments. The program also assesses and analyzes effectiveness in providing maintenance and other types of logistics support of the Fleet, specifies needed support improvements to equipment life-cycle managers and tracks their implementation. A successful ILS overhaul pilot program, implemented in Puget Sound already, will be implemented at 3 other Shipyards in FY 1986. In FY 1987, the program will be implemented at SUPSHIPS and all remaining Shipyards. This program formalizes and automates the industrial activities by tracking ILS identification, acquisition, and delivery status through the SHIPALT development process, hardware acquisition, and final delivery aboard an overhauling ship.

SMPP/MIP/DART - Program's mission is to reduce maintenance costs and increase ship and equipment availability. Each year a select group of projects are pursued with each project taking from 3-5 years to complete. This activity transfer to the Submarine Ship Surface Performance Monitoring/Support (SSMPMS) Program in BA 2 in FY 1986.

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	WY	\$	WY	\$	WY
Total Funding	<u>\$1,383</u>		<u>\$1,579</u>		<u>\$2,154</u>	
ILSTIP	699	8.5	1,579	19.0	2,154	25.8
SMPP/MIP/DART	684		-		-	

ILSTIP Projects

ILS for Overhaul	164	2.0	854	10.0	1,336	16.0
Shipboard ILS Audits	125	1.5	150	1.8	250	3.0
LRG Audits & Findings	100	1.2	120	1.4	120	1.4
Automated ILS Plans	40	0.5	125	1.5	125	1.5
Criteria for CFE	30	0.4	100	1.5	100	1.2
Identify Systemic Log. Spt. Problems	65	0.8	80	1.0	80	1.0
INSURV ILS Audits	50	0.6	65	0.8	65	0.7
LSA Execution Guidance	50	0.6	85	1.0	78	1.0
Auditor Certification	25	0.3	-	-	-	-
Maintenance Planning	50	0.6	-	-	-	-

SMPP/MIP/DART *	FY 1985	FY 1986	FY 1987
1. DART - CASREP and Maint Data Repts	33		
2. Improved Availability Planning Program	90		
3. Maintenance Spt	102		
4. Requirements for Intermediate Maint.	279		
5. Tech Assist Analysis	180		

\* This program is transferred to BA 2, Surface Ship Systems Monitoring Performing Support (SSMPMS) in FY 1986 and FY 1987.

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

F. ACQUISITION STRATEGY

1. Standardization

This program is designed to conserve resources by standardizing equipment, parts, material and related software and procedures. The program provides for the development of general approaches and detail procedures for achieving standardization in ship acquisition and maintenance actions. It also supports a continuing effort to minimize models and varieties of shipboard equipment.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	<u>\$</u>	<u>\$</u>	<u>\$</u>
Total Funding	175	255	327
=====			
a. Maintain & Update Data Base	63	120	120
b. Standardize Ovhl Procedures	112	71	0
c. Update Std. Component List	0	64	207

G. SURFACE SHIP SUPPORT

1. Fleet Modernization Program Management Information System (FMPMIS)

The FMPMIS (Formerly SAMIS) provides ADP support for the Fleet Modernization Program (FMP) planning and execution of alteration installations aboard ship. FMPMIS includes a related effort to modernize ADP hardware and software to achieve significant management improvements being monitored and directed by the VCNO. These efforts are directly related to the operational/combat readiness of ships leaving the overhaul process. This program provides a fully documented program plan which includes program responsibility, a carefully defined system specification, identified interfaces, and a detailed implementation plan.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	<u>\$ Units</u>	<u>\$ Units</u>	<u>\$ Units</u>
Total Funding	\$3,107	\$5,207	\$7,037
=====			
1. SAMIS Impl Spt Cont	1,027	1,400	2,230
2. NARDAC Computer Spt	1,500	3,367	4,807
3. Prototype Lease Equip	580	440	-0-

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

2. Shipboard Non-Tactical ADP Program (SNAP)

The SNAP I and II programs are an effort to replace obsolete nontactical automated support on the larger ships and to introduce standard nontactical ADP equipment on smaller ships of the Fleet in order to reduce clerical and administrative burdens. Higher goals of readiness require the effort toward decreasing time spent on administration so that increased time can be spent on operational functions. Morale is also improved by workload reduction. SNAP I replaces obsolete equipment on large ships such as aircraft carriers and auxiliaries and adds an interactive capability throughout the ships. SNAP II provides ADP capability for 450 smaller ships.

	\$ <u>FY 1985</u>	\$ <u>FY 1986</u>	\$ <u>FY 1987</u>
	Units	Units	Units
TOTAL FUNDING	13,201	11,867	8,479
1. Field Support	2,346	3,702	3,531
2. Maintenance	4,579	3,030	1,640
3. Supply Support	3,042	2,025	498
4. Management	479	1,095	1,150
5. Other Log Spt	2,755	2,015	1,660

PROGRAM STATUS

1. SNAP I Installed	45	21	7
2. SNAP I Supported	139	160	167
3. SNAP II Installed	45	89	106
4. SNAP II Supported	113	202	308

3. PHM Logistic Support

Provides PHM Class support through the use of contractor logistic support. This program effort is a management effort to improve the readiness of these ships especially in the materials management area by having a ready stock of unique and necessary parts for the six ships. The contractor logistic support provides unique material support, engineering and technical support and planning yard design agent support.

Number of Ships	6	6	6
Total Funding	<u>FY 1985</u> 4,070	<u>FY 1986</u> 7,007	<u>FY 1987</u> 5,020
1. Materials Management*	2,537	4,204	3,263
2. Eng and Tech Support	1,533	2,079	1,757
3. Materials	0	724	0

\* BA 7 pays for management of materials originally procured with SCN as well as Fleet and NAVSEA O&M,N.

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

<u>Inputs/Outputs</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Repairables process/ per mo	48	84	60
Turnaround time/days	106	61	85
Line item procurement/items	55	96	68
Leadtime/days	137	78	110
Line Item issues/ per mo.	121	170	130
Tech Sup Reqs Placed in work/mo.	1	1.5	1
Tech Sup Reqs complete	.5	1	.5
Manual Revisions/mo.	1	2	1
Program Support Requests issued per month	3	5	3.5
Program Support Requests completed per month	1.75	2.5	1.9

H. DIVING

1. Navy Diving Program

The efforts of the Navy Diving Program enable the Navy to conduct safe and efficient diving, salvage, and underwater swimming operations. Funding is utilized for:

A. Testing and Evaluation - of experimental diving equipment, and of human subjects with regard to diving physiology and decompression tables (testing is primarily conducted by the Experimental Diving Unit (EDU);

B. Fleet Support - which includes life-cycle management of Navy diving equipment systems, certification of all Navy diving systems, and the provision of technical and logistics support for diving, salvage, underwater swimming and Explosive Ordnance Disposal (EOD) operations;

C. Development and Revision of Written Material - standards, procedures, instructions, manuals, and other diving publications.



Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	3,173		3,232		2,894	
Workyears (EDU)	16		25		25	
=====						
A. <u>Testing and Eval</u>	UNITS					
1. # of test dives		2,203		2,203		2,100
2. # of piece of equip tested		55		55		55
3. Surf Spt div tests		440		440		440
4. Diver air purity analyses		265		305		270
B. <u>Fleet Support Actions</u>						
1. Div eqp sys certifs.		250		70		50
2. Field Op evals (# of items)		71		71		71
3. Field Changes*		35		40		38
4. Unmanned dives in spt of Flt		500		550		510
5. Config mangmnt* (systems dev)		3		2		1
C. <u>Written Material Developed or Revised</u>						
1. Div Manual Revs (by chapter)		1		1		1
2. Maint procedures dev or rev		12		0		0
3. Faceplate Mag (# of issues)		4		0		4

\* Units represent types of equipment rather than individual items undergoing field changes or configuration management.

2. Emergency Salvage Operations

Program provides the capability to respond to operational salvage and stranding requirements for Navy ships, submarines, cargoes, and high interest items (missiles, ordnance, and other objects). Funding pays for ships, equipment personnel, and other material required for emergent salvage operations.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding (\$000)	\$ 1,232		\$1,278		1,539	
=====						
Ship Salvage Operations	732	3	778	3	1,039	6
Submarine and High Interest Salvage Ops	500	2	500	2	500	2

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

I. INACTIVATION OF SHIPS

Inactivations - Surface

Reimburses Maritime Administration (MARAD) for shipyard maintenance and temporary lay-up of Navy ships. Funds requirements to prepare surface vessels for storage by MARAD. Funds preparation of vessels retired from active fleet for long-term wet berth stowage in Navy facilities.

Inactivations - Submarines

Provides for advance planning and execution of pre-inactivation industrial availabilities of nuclear submarines and for actual inactivation in accordance with established schedules. Cost estimates are for minimum austere inactivations including waterborne layup "as-is", defueling, blanking of sea connections, removing hazardous materials and fluids, removing equipment and repair parts of immediate value to operating forces and placing the ship in a safe condition until the ultimate disposal method is determined.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	\$ <u>Units</u>	\$ <u>Units</u>	\$ <u>Units</u>
Total Funding	5,522	53,833	72,722
Surface	1,079	527	861
Inactivations			
Submarine	4,443	53,306	71,861
Inactivations			

=====

<u>Surface</u>	<u>1,079</u>		<u>527</u>		<u>861</u>	
<u>Inactivations</u>						
LSD	320	2				
YFN						
ARS					200	1
ATF	180	1	230	2		
CG						
Temporary Lay-ups	579		297		661	

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	<u>\$</u>	<u>\$</u>	<u>\$</u>
<u>Submarine</u>			
<u>Inactivations</u>	<u>4,443</u>	<u>53,306</u>	<u>71,861</u>
SSN 578 (Adv Plng)	2,859	1,865	-
SSN 578 (Inact)	-	20,128	-
SSN 579 (Adv Plng)	-	1,960	2,807
SSN 579 (Inact)	-	-	18,853
SSN 583 (Adv Plng)	25	4,815	-
SSN 583 (Inact)	-	-	20,221
SSN 588 (Adv Plng)	-	1,000	1,000
SSN 588 (Inact)	-	-	17,821
SSN 588 (Reactor	-	-	3,500
Disposal)			
SSN 592 (Adv Plng)	59	2,000	-
SSN 592 (Inact)	-	16,038	-
SSN 592 (Reactor	-	-	3,500
Disposal)			
SSN 599 (Reactor Disp	1,500	-	-
Adv Plng)			
SSN 599 (Reactor	-	5,500	-
Disposal)			
SSN A (Adv Plng)*	-	-	2,961
SSN B (Adv Plng)*	-	-	1,198

\*Hull numbers for submarines which are scheduled for inactivation in the outyears are classified. This information can be provided upon request.

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

J. SHIPYARD MODERNIZATION

1. Shipyard Modernization Program

This provides for a number of programs for enhancing and modernizing the production and industrial capacity of shipyards and ship facilities. Funding supports the Depot Operations Improvement Program (DOIP); computer support for long range workload forecasting and facility equipment requirements; propeller manufacturing and measurement; design, installation, and certification of magnetic silencing equipment at Naval Stations; drydock certification per Military Standard 1625A; productivity improvements; Test, Measurement, Diagnostic Equipment (TMDE) analysis; and capital equipment installation at non-NIF activities. This program also supports the maintenance of inactive nuclear hulls, shipyard physical security, asbestos litigation office, and Forces Afloat Maintenance Improvement (FAMI) engineered time values and intermediate maintenance activities combat support training. In addition, funds covering the procurement of industrial plant equipment at Non-Industrial Activities were transferred to this program starting in FY 1986.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	\$8,982		\$14,121		\$10,541	
DOIP	460		554		744	
(# WY)		5		6		9
Computer Support	445		593		574	
(# of timesharing hrs)		200		202		230
Magnetic Silencing	3,570		5,355		3,176	
(# of systems)		10		15		9
Drydock Cert	1,193		1,522		1,319	
(# cert/recert)		75		80		76
Indust. Operat. Improvement	631		816		1,235	
(# WY)		7		8		12
TMDE	0		112		360	
(# WY)				1.3		4
Install non-NIF equip	0		0		0	
(# equip installed)						
Maintenance Nuclear Hulls	841		926		922	
(# of hulls)		10		9		9
Shipyard Security	0		983		0	
(# of shipyards)				8		
Asbestos Litigation	293		0		582	
(# of cases)		8				11
FAMI-Engineered Time * Values	1,176		1,330		-0-	
(# of OP Guides)		5,900		5,940		
FAMI-IMA Combat Sys	23		1,180		1,282	
(# Manweeks Training)		102		5,640		7,500
Indust Plant Equip**	0		439		347	
Electric Cables	350		311		0	

\* FAMI-Engineered Time Values transfers to FAMI Training in BA 8 in FY 1987.

\*\* Funds for Industrial Plant Equipment transferred from OPN BA1 and BA4 in FY 1986.

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

2. Ships and Ordnance Maintenance Support

The Other Support Program provides funding for four programs. These programs are:

1. NAVSEA Technical and Exhibition Ship Model Program and Navy Exhibit, Chicago Museum of Science and Industry.
2. Leased bachelor quarters for the Combat System Test Center, Ronkonkoma, NY.
3. Beneficial Suggestion Awards Program.
4. Maintenance Interservicing Support Office (MISO) which provides a central point of contact for all NAVSEA depot level maintenance matters to ensure that adequate capability and capacity exist for depot level repairable workload projections for all designated overhaul points.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding (\$000)	\$656		\$547		\$530	
=====						
1. Ship Model Program						
/#models	275	1,404	*			
2. Navy leased quarters						
/#Apts	30	3	*			
3. Beneficial Suggestion/						
# of Awards	89	100	*			
4. MISO/#Interservice						
Agreements	262	35	333	35	323	35
Designated Ovhl						
Point/MIS**			214	3	207	3

\* Effective in FY 1986, the Navy Leased Quarters, Beneficial Suggestion Awards and the Ship Model Programs are transferred to the Field Operations Activity Group, Operational Support Field Sub-Activity Group.

\*\* This activity was transferred from EOC Coordination in BA 2.

K. DATA SUPPORT

The program supports information and data systems designed to improve the in-house capability for life cycle management of ships and weapon systems. This support is accomplished primarily through such activities as the NAVSEA Automated Data Systems Activity (SEAADSA) and the Navy Regional Data Automation Center (NARDAC). SEAADSA is the central design agent for automation technology and ADP systems. SEAADSA also performs management reviews of proposed ADP systems, equipment services, applications of ADP software and ADP installation at NAVSEA facilities. NARDAC provides in-house support for comptroller, contract, and other management requirements. The program also funds office automation studies and various other information support requirements.

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd)

	FY 1985 \$ Units	FY 1986 \$ Units	FY 1987 \$ Units
Total Funding (\$000)	\$5,163	\$4,567	\$4,719
Workyears (SEAADSA)	84	84	84

SEAADSA	3,685	3,375	3,475
NARDAC*	235	348	367
Other ADP Support	825	715	725
Information Support	418	129	152

\* In FY 1985, NARDAC was funded partially through the CHNAVMAT claimancy.

L. UNDERUTILIZED PLANT CAPACITY

This program provides a subsidy to Naval weapon stations, allowing them to maintain excess plant capacity which could be used in the event of war. The subsidy for a facility is the amount of funds needed to maintain 85 percent of maximum capacity, minus the amount of NIF funds budgeted for that year. Funding this program in an amount other than that required results in a gain or loss in the Accumulated Operating Results (AOR) of the ordnance activity fund.

	FY 1985 \$	FY 1986 \$	FY 1987 \$
Total Funding	103,118	100,187	100,976
WPNSTA			
Concord	17,366	17,996	17,727
WPNSTA			
Earle	13,915	16,037	13,939
WPNSTA			
Charleston	825	944	848
NAVWPNSUPPCEN			
Crane	11,054	9,538	9,903
NAVORDSTA			
Indian Head	21,038	18,917	21,286
NAVORDSTA			
Louisville	11,605	12,881	12,639
WPNSTA			
Seal Beach	13,050	12,506	14,798
WPNSTA			
Yorktown	12,642	11,368	9,836
NAVUSEAWARENGSTA			
Keyport	1,623	-	-

The funding for each facility is an accounting transfer which allows the facility to reduce the amount of NIF overhead funding charged as part of its stabilized rate. This allows the facilities to compete for work without being penalized by having to charge customers for maintaining capacity which bears no relation to the work the facility will perform for the customer.

Activity Group: Logistic Support Activities (cont'd)

IV. Personnel Summary (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military E/S</u>	<u>74</u>	<u>75</u>	<u>75</u>
Officer	10	13	13
Enlisted	64	62	62
B. <u>Civilian E/S</u>	<u>111</u>	<u>111</u>	<u>111</u>
USDH	111	111	111

Department of the Navy  
Operation and Maintenance, Navy  
Exhibit OP-05

Activity Group: Industrial Preparedness  
Budget Activity: BA-7 - Central Supply and Maintenance  
Claimant: Naval Sea Systems Command

I. Description of Operations Financed

The programs funded under this activity group include:

- (1) Government-Owned Contractor-Operated (GOCO) Facilities
- (2) Industrial Readiness

Government-Owned, Contractor-Operated Facilities (GOCO) provides for lease administration of GOCO facilities and drydocks. Also provides for maintenance, protection and storage of government-owned special tooling/test equipment required for Navy programs in contractor facilities.

Industrial Readiness provides for development of formal plans with industry for emergency production of weapons systems. It involves planning, with individual producers of critical items and for a specific level of production sufficient to meet surge and mobilization requirements. It provides for the development of industrial preparedness, measures to ensure utilization of improved techniques to shorten production lead time and reduce requirements for industrial manpower and critical materials. Also, the program funding provides for standby and maintenance of production lines as well as the packing, crating and handling of special tooling and special test equipment being moved to mobilization storage facilities. Surge Planning provides for studies of critical weapons systems required for surge and mobilization. Surge analyses provide detailed industrial base data extending through the sub-tier producers. Defense contractors do not provide the level of detail required by the Production Base Analysis without specific funded surge clauses/contracts. Projects to be performed: Advance Capability Torpedo (ADCAP), Advance Light Weight Torpedo (ALWT), and Rolling Airframe Missile (RAM) facilities.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Group Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
GOCO	0	0	0	91	82	-9
Industrial Readiness	0	0	0	1,061	945	-116
TOTAL, INDUSTRIAL PREPAREDNESS	0	0	0	1,152	1,027	-125



Activity Group: Industrial Preparedness (Cont'd)

<u>B. Reconciliation of Increases and Decreases</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$1,152
2. Pricing Adjustments	57
A. Industrial Fund Rates	(35)
B. Other Pricing	(22)
3. Program Decreases	-182
A. Other Program Decreases in FY 1987	(-182)
1) GOCO	-14
2) INDUSTRIAL READINESS	-168
Reduction reflects reduced support for the Asset Capitalization Program at Crane (-155) as well as reduced surge planning efforts (-13).	
4. FY 1987 President's Budget Request	\$1,027

Activity Group: Industrial Preparedness (Cont'd)

III. Performance Criteria and Evaluation

A. Government-Owned, Contractor-Operated Facilities (GOCO)

	<u>FY 1985</u> \$ Units	<u>FY 1986</u> \$ Units	<u>FY 1987</u> \$ Units
Total Funding * (\$000)	-	91	82
=====			

GOCO Facilities

ST/STE Repository

Receiving/Ship/

Storage

Protect/Dist

Facility/Drydock

Lease

Administration

-	-	79	-	68	-
-	-	12	-	14	-

B. Industrial Readiness

	<u>FY 1985</u> \$ Units	<u>FY 1986</u> \$ Units	<u>FY 1987</u> \$ Units
Total Funding* (\$000)	-	1,061	945
Asset Capitalization - Program-Crane	-	578	456
Surge Planning	-	483	489

\* This activity group was previously funded by the Naval Material Command and upon its disestablishment, the applicable effort was transferred to the Naval Sea Systems Command

IV. Personnel Summary. (End Strength) N/A

DEPARTMENT OF THE NAVY  
OPERATION & MAINTENANCE, NAVY  
Exhibit OP-05

Activity Group: Engineering Support Services  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Sea Systems Command

I. Description of Operations Financed

This activity group provides the technical and engineering efforts to maintain and improve the operational readiness of ship and combat systems in the Fleet. Engineering efforts include:

- development of improvements to decrease safety and fire risks for ships and ship systems;
- testing and analysis of the integration of diverse shipboard systems;
- field engineering to respond to the Fleet's emergency problems;
- analysis of performance data to improve systems' availabilities;
- operational testing of combat systems to assure reliability and to transfer technical knowledge to the ships' force;
- performance and analysis of tests; such as shock tests, inclining experiments, and submarine acoustic trials, leading to improved ship survivability, stability, and lower noise levels; and
- testing, training, and certification to assure product quality.

Since the Naval Sea Systems Command is responsible for the maintenance of ships, shipboard systems and related equipment, and weapons and ordnance systems. NAVSEA is also responsible for a variety of engineering tasks which range from planning for the extension of the useful life of a tactical data system to 10 years, to improving overhaul procedures for a major combat system, to providing technical manual updates and reprints for all of the NAVSEA equipments. For each system managed by NAVSEA, from MK 75/76MM gun systems to LM2500 gas turbine engines to nuclear propulsion systems, technical engineering expertise and support is required to improve the reliability, sustainability, safety, and maintainability of the Navy's ship systems.

Activity Group: Engineering Support Services (cont'd)

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	FY 1985	Budget Request	FY 1986 Appro- priation	Current Estimate	FY 1987 Budget Request	Change
Surface Warfare Systems						
HARPOON	4,942	6,776	6,730	6,086	7,078	992
Combat Systems Eng Spt	5,220	4,575	4,604	4,040	4,146	106
CIWS Close-in Wpn Spt	8,591	9,237	9,241	7,756	6,906	-850
Gun F/C Systems Flt Spt	7,061	6,653	6,619	7,599	11,076	3,477
Wpns Cntrl Swtchbds	931	1,368	1,368	1,470	1,837	367
EOD/Swimmer Wpns	7,445	3,432	3,547	7,830	5,132	-2,698
Gun Wpns Sys Flt Spt	4,428	4,154	4,143	4,982	6,179	1,197
Mine Logistics Spt	2,106	4,225	4,258	3,193	2,361	-832
Sonar Sys Spt	4,975	6,205	6,328	5,564	7,764	2,200
Submarine Sys Spt						
Submarine Noise Red	13,817	10,957	10,892	10,451	7,578	-2,873
DSSP	16,062	16,969	16,958	14,808	16,674	1,866
Surface Sys Spt						
Inspection & Testing	1,936	2,052	2,167	2,104	2,900	796
Ship Dsgn Tech Req Doc	1,680	1,868	1,842	1,742	2,037	295
Ship Sys Engineering	17,919	16,757	13,240	21,069	40,173	19,104
Stm Prop Plnt Imprvmnt	8,931	5,303	5,398	5,725	8,379	2,654
Underway Replenishment	11,883	4,367	4,363	5,160	6,044	884
Habitability	445	382	382	371	502	131
Ships Trials & Tests	5,081	4,933	4,907	4,747	6,112	1,365
Electronic Systems						
SEMCIP/EMI Control	15,568	15,207	15,148	15,276	15,063	-213
Electronic Test & Rpr	612	2,138	2,128	1,533	2,581	1,048
NTDS	2,768	2,178	2,270	2,094	3,183	1,089
Technical Publications						
Technical Publications	19,927	18,269	17,215	17,737	43,473	25,736
Combat Systems Support						
GIDEP	941	339	339	327	974	647
Total Ship Test/Prod	1,972	1,649	1,639	2,167	4,817	2,650
Inservice Explosives	1,266	448	448	434	379	-55
Reliability & Material						
Handling Engineering						
Ordnance Handling Spt	1,067	1,452	1,452	1,407	1,681	274
Reliab & Maintainability	782	530	530	513	505	-8
Qual&Reliab Assurance						
Qual&Reliab Assurance	4,400	2,137	2,141	1,880	4,253	2,373
Nuc Prop Tech Logistics						
Nucl Prop Tech Log	77,003	81,749	81,665	83,895	53,867	-30,028
Operating Reactor Plant	0	0	0	0	44,800	44,800
TOTAL, ENG SPT SRVC	249,759	236,309	231,962	241,960	318,454	76,494

Activity Group: Engineering Support Services (cont'd)

B. <u>Reconciliation of Increases and Decreases</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$241,960
2. Pricing Adjustments	8,445
A. Stock Fund	(-1)
1) Non-Fuel	-1
B. Industrial Fund Rates	(3,368)
C. Average Grade Reduction	(-192)
D. Other Pricing	(5,270)
3. Functional Transfers	-1,704
A. Transfers Out	
1) Inter-Appropriation	(-1,704)
a) SURFACE WARFARE SYSTEMS	
i) Mine Logistics Support	-1,604
Funding for Mine Countermeasures transferred to O&MN,R MCM Maintenance Support.	
b) SURFACE SYSTEMS SUPPORT	
i) Ship Systems Engineering	-100
Funding for Mine Countermeasures transferred to O&MN,R MCM Maintenance Support.	
4. Program Increases	117,749
A. Other Program Growth in FY 1987	(117,749)
1) SURFACE WARFARE SYSTEMS	
i) HARPOON	737
HARPOON program is funding support for 14 additional ships and 3 new variants in FY 1987. This increased effort required 14 additional workyears in the following areas: In-service Engineering, Integrated Logistics, and Program Technical Support.	
ii) Gun Fire Control Systems Fleet Support	3,082
Increased funding for the MK 56 fire control systems will enable these older systems to operate with more reliability by providing improved logistics and supply support (1,090). Additional funding for the MK 86 (838) will continue post-production support of the AN/SPG-60 and will increase logistics and technical support to reduce the number of CASREP's and maintain fleet readiness. Increased funding for MK 37/38 fire control systems installed on the reactivated RB-61 class ships will enable these systems to operate with more reliability by providing	

Activity Group: Engineering Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd) Amount

	improved logistics, engineering, ISEA and direct fleet support (500). In addition, in-service support will be required for the Guided Projectile which will be fired from MK 45 5"/54 gun mounts (529). Additional support required in FY 1987 for Night Vision Devices (125).	
iii)	<u>Weapons Control Switchboards</u> In-service engineering support for Voice Interior Communications increase (100); Engineering Services for Weapon Control Switchboard (190).	290
iv)	<u>EOD/Swimmer Weapons System</u> Maintenance of EOD Systems requirements increase in FY 1987.	277
v)	<u>Gun Weapons System Fleet Support</u> Requirements increase due to the continued introduction of 40MM MK 2, MK 3 and 76MM MK 75 and 5"/54 MK 45 Gun Systems (10 major gun systems and 152 minor caliber systems). This support is necessary to solve system problems, improve logistics, update documentation; all of which improve gun systems readiness manifested by improved reliability, maintainability, and availability.	926
vi)	<u>Mine Warfare Engineering Support</u> Increase funds support of 5 additional technical projects for Mine Countermeasures	677
v)	<u>Sonar Systems Support</u> The number of LAMPS MK III systems operational increases by 10 shipboard systems, 2 land based test sites, & 2 mobile team training units in FY 1987 (1,740). In addition, the number of change installations for acoustics communication equipment (AN/WQC-2A) increased by 24 and Probe Alert installations increase by 10 (294).	2,034
2)	<u>SUBMARINE SYSTEMS SUPPORT</u>	
i)	<u>DSSP</u> Installation of field changes and integrated control and display improvements, completion of design for HM&E improvements for Deep Submergence Rescue Vehicles (1,403); engineering and design for Side Bouyance Pods for NR-1 (401); engineering analysis to replace non-supportable/obsolete equipments for TURTLE and SEA CLIFF (171).	1,975
3)	<u>SURFACE SYSTEMS SUPPORT</u>	
i)	<u>Inspection and Testing</u> Increase will allow for the purchase of 698 additional tests, mainly for QPL's to increase competition.	722

Activity Group: Engineering Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd) Amount

- |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |        |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| ii)  | Shipbuilding Design Tech Doc Req                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 259    |
|      | Increase will allow for 21 additional standard and type drawings being prepared or updated for acquisition of equipment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |        |
| iii) | Ship Systems Engineering                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 19,397 |
|      | <p><u>Materials Engineering:</u> Increase provides for increased engineering support to design-out ship corrosion problems, resulting in reduction of corrosion maintenance by fleet personnel (2,140).</p> <p><u>Hull Systems: Deck Systems -</u> FY 1987 new start to correct deficiencies and reduce CASREPS by 63 (200); and provide LHA support (130).</p> <p><u>Damage Control:</u> Increase will result in improvement of Damage Control equipment and procedures; completion of OPNAV Damage Control/Firefighting working group action items and Safe Recreation Items; increased engineering support of the improvement of storage facilities on ships; increased logistics support and in-service engineering for combat, firefighting, breathing and survival personnel equipment; increased support in improved effectiveness of compartment air testing methods; and increased support for sonar bow dome program (2,771).</p> <p><u>Auxiliary Systems:</u> Increase will provide for the FY 1987 new start to develop modifications to increase Operational Availability and simplify operations of the electrolytic oxygen generator (525); for FY 1987 new start for qualified service list technical support to qualify equipment overhaul facilities, evaluate the adequacy of technical documentation, review applications and perform audits (300); for increased engineering, maintenance and logistics improvements for Auxiliary systems and equipment such as fire-fighting systems, life support equipments and main feed pumps (823).</p> <p><u>Propulsion:</u> Increase will provide for the analysis of the cause of rotor cracking and poor reliability of steam propulsion and distilling plant equipment (671); for minimizing rework and streamlining repair process for Boiler overhaul improvement program (505); and for resolving critical submarine equipment problems on noise quiet ball bearings (200) and diesel engines (700).</p> <p><u>Electrical:</u> GM-1A Degaussing - to investigate and implement support problems in hardware documentation, training and supply support (212); 60/400 Hz - for the</p> |        |

Activity Group: Engineering Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

Amount

- modification of switchboards and installation of design package on a DD 963 Class Ship (1,076); 2000 KW Generator - to upgrade ships service power generation capacity on DD 963 Class Ships (1,447); Electrical Power Interface Compatability (EPIC) development of modifications to eliminate power fluctuations which can shut down a combat system and ruin expensive equipment (408); Fiber Optics for the development of navy specifications and standards and engineering design development for integration of fiber optics technology into Navy Ship Systems (6,810). Also funds the upgrade of other electrical equipment (479).
- iv) Steam Propulsion Plant Improvement 3,364  
Maintenance effort is increased to 350 ships and feedback reports increase as Engineering Operational Sequencing Systems (EOSS) developments complete and emphasis shifts to maintenance of installed EOSS (967). Increase for standardization of feedback (library standardization) report processing (466). Gas turbine and diesel training hot plant facilities are now included for upkeep and maintenance. Required reviews of school curriculum are expanded to include gas turbine and diesel courses; On-Line Verification is expanded to include diesel ships (494). Increase in technical manual revision as diesel/gas turbine documentation is included in the program (565). Funding will provide for additional technical tasks identified for diesel and gas turbine ships. Some deferred steam propulsion efforts now to be funded (872).
- v) Underway Replenishment 1,407  
Increase for the cargo/weapons elevator for engineering support to develop replacements for many obsolete components that can no longer be obtained as spare parts (1,237); increase in the standard replenishment along side method will decrease CASREPS by 5 (170).
- vi) Habitability 116  
Increase in furniture/equipment ISEA support.
- vii) Ship Trials and Tests 1,737  
Increase effort in shop hardening for electric power reliability (1,047); start of communications support (200); increased support for missile systems (250); increase of 2 inclining experiments (210).



Activity Group: Engineering Support Services (cont'd)

B. <u>Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
4) <u>ELECTRONIC SYSTEMS</u>	
i) <u>Electronic Test and Repair</u> 2M Electronic repair technology upgrade including Shipboard Portable Electronics Test Equipment Requirements List updates (677) and support for second generation Automatic Test Equipment to handle high speed digital and analog electronic modules/printed circuit cards (291).	968
ii) <u>NTDS</u> 2 additional maintenance/test program system manual updates and 3 test program mods (473); inservice field changes implemented increased by 10, 11 additional configuration audits and introduction of new equipment (559).	1,032
5) <u>TECHNICAL PUBLICATIONS</u>	24,886
Increase will update 367 Technical Manuals (TMs) which will reduce the backlog of deficient TMs by 142 (23,783); increase in technical manual program support (786); and 851 additional TMs will be reprinted (317). Increase is in response to Navy and DOD Inspector General reviews which have indicated the need for correcting deficient technical manuals. In addition procedures have been implemented to insure that the technical manuals being provided by contractors for new equipments will not be deficient. The goal of this program is to eliminate deficient TM by the end of FY 1991. Program savings from this effort will first be realized and shown in the FY 1988 budget and will continue to grow as the backlog of deficient TMs decreases.	
6) <u>COMBAT SYSTEMS SUPPORT</u>	
i) <u>Government/Industry Data Exchange Program (GIDEP)</u> Funding will provide for processing of 1550 additional technical reports and 19 additional microfilm reels.	628
ii) <u>Total Ship Testing Production</u> Provide for operational support for the Shipboard Electronic Systems Evaluation Facility which improves the evaluation of shipboard combat systems and communications after overhaul (800); in-service support for the shipboard combat simulation testing and training equipment on the DDG-993 Class ships used for testing of and training personnel on combat systems (800); and 14 additional manuals developed by the Combat System Technical Operating Manual program which provides ships' force personnel with procedures for operating and maintaining combat systems (936).	2,536

Activity Group: Engineering Support Services (cont'd)

B. <u>Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
7) RELIABILITY AND MATERIAL HANDLING ENGINEERING	
i) <u>Ordnance Handling</u>	201
Increase of 2.7 workyears of effort for shipboard handling stowage training (170); other increases (31).	
8) QUALITY AND RELIABILITY ASSURANCE	2,359
Increase supports Non-Destructive Test Training & Certification (303) and Laboratory Production Improvement and Accreditation Program (50), 2 new efforts being initiated in FY 1987. Increment also reflects increased shipyard Quality Improvement (40), SUPSHIP Quality Improvement (72) and Level I Material Control (41) efforts. Increase of 10 ship readiness models and associated analysis (709); 18 equipment pieces analyzed which will identify equipment/system readiness drivers and quantify readiness improvement at the ship level (442); and 105 design analyses conducted which will ensure that reliability, maintainability and quality are designed and built into NAVSEA products (702).	
9) NUCLEAR PROPULSION TECHNICAL LOGISTICS	3,339
i) <u>Nuclear Propulsion Technical Logistics</u>	
Growth is necessary to support new aircraft carriers and submarines entering the fleet, to support the initial overhaul or refueling of the newer classes of nuclear powered ships, and to ensure the readiness of the other nuclear ships, which are running harder and getting older.	
ii) <u>Operating Reactor Plant Technology</u>	44,800
Starting in FY 1987, this line funds O&M,N work at the Naval Nuclear Propulsion Program laboratories, formerly budgeted under "Nuclear Propulsion Technical Logistics" (35,464). This change is intended to enhance financial control and reflects the fact that laboratory support, which once was a small fraction of nuclear propulsion technical logistics work, has grown to the point of comprising almost have such work. Growth above the \$35,464 thousand level is primarily the result of shifting to O&M,N additional essential ongoing laboratory work, which was formerly budgeted in RDT&E. This former RDT&E work by FY 1987 will progress to the point that it belongs in O&M,N (9,336).	

Activity Group: Engineering Support Services (cont'd)

B. <u>Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
5. Program Decreases	-47,996
A. Other Program Decreases in FY 1987	(-47,996)
1) <u>Civilian Ceiling Waiver</u>	-674
Savings attributable to more efficient and economical execution of workload experienced resulting from waiver of statutory end strength ceilings of FY 1985	
2) <u>SURFACE WARFARE SYSTEMS</u>	
a) <u>Combat Systems Engineering</u>	-93
Decrease reflects reduced ship qualification trials support for Ship Integrated Defense (-34); Reduced ShipAlt installation support for Program Planning Combat System Management Information (-59).	
b) <u>CIWS</u>	-1,217
Funding will provide 15 fewer in-service engineering workyears of effort for the CIWS systems along with decreased other engineering support to the fleet.	
c) <u>EOD/Swimmer Weapons System</u>	-3,250
In FY 1987 no funding is required for Fleet Training of EOD Systems (-650). The Classified project - Retract Willow - is funded at a reduced level (-2,600).	
3) <u>SUBMARINE SYSTEMS SUPPORT</u>	
a) <u>Submarine Noise Reduction</u>	-3,084
Five fewer acoustical trials (-1,212); delay of engineering investigations preparatory to silencing ShipAlt development and hardware procurement (-1,872).	
b) <u>DSSP</u>	-530
End of support for Point LOMA support ship and end of Submarine Personnel Rescue engineering and logistics support.	
4) <u>SURFACE SYSTEMS SUPPORT</u>	
a) <u>Ship Systems Engineering</u>	-901
Reduction reflects reduced support for hull systems: HARPOON re-arming - investigate 63 fewer CONARS (-208); Propulsion - Propulsion control system components improvement program completes in FY 1986 (-121); DD 963 Design - scope of FFG-7 class Sensor Navy Steering Board program technical support in FY 1987 will be less than support required for DD 963 class design deficiencies in prior years (-572).	
b) <u>Steam Propulsion Plant Improvement</u>	-903
EOSS development completes in FY 1986.	

Activity Group: Engineering Support Services (cont'd)

B. <u>Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
c) <u>Underway Replenishment</u> Decrease in aircraft elevator support will cause an additional 7 CASREPS in FY 1987 (-584); decrease in AO/AR crane support (-100).	-684
d) <u>Ship Trials and Tests</u> Decrease in ship hardening on gun systems (-350); and mast mounted equipment (-116).	-466
5) <u>ELECTRONIC SYSTEMS</u> a) <u>SEMCIP/EMI Control</u> Reduction in problem investigation, radiation hazard surveys, inspection/survey support and electronic system evaluation facility support.	-551
6) <u>COMBAT SYSTEMS SUPPORT</u> a) <u>In-Service Explosives</u> Reduced test and engineering support (-34); reduced NATO support (-38).	-72
7) <u>RELIABILITY AND MATERIAL HANDLING ENGINEERING</u> a) <u>Reliability and Maintainability</u> Reduced production design and acquisition design support.	-37
8) <u>QUALITY AND RELIABILITY ASSURANCE</u> Decrease results from the termination of the fleet quality assurance effort.	-70
9) <u>NUCLEAR PROPULSION TECHNICAL LOGISTICS</u> Realignment of ongoing laboratory work to Operating Reactor Plant Technology.	-35,464
6. FY 1987 President's Budget Request	\$318,454

Activity Group: Engineering Support Services  
 III. Performance Criteria

A. SURFACE WARFARE SYSTEMS

1. HARPOON

The program provides for introduction and follow-on support of the HARPOON Weapon System, a long-range anti-ship missile system, into submarines and surface combatants. It includes support of the command and launch system and the test set/simulator for all platforms.

	FY 1985		FY 1986		FY 1987	
	\$	WY	\$	WY	\$	WY
Total Funding	4,942	76	6,086	95	7,078	109
=====						
In-Service Eng.	1,301	20	1,582	25	1,840	29
Fleet Support	201	3	243	4	283	4
Integrated Logistics	1,608	25	1,948	30	2,265	35
Program Tech Spt.	1,580	24	2,069	32	2,407	37
Quality Assurance	101	2	122	2	141	2
Maintenance	75	1	61	1	142	2
Test Development	76	1	61	1	-	-

O&MN funding supports the following number of ships and HARPOON variants:

	FY 1985		FY 1986		FY 1987	
	<u>Ships</u>	<u>Variants</u>	<u>Ships</u>	<u>Variants</u>	<u>Ships</u>	<u>Variants</u>
Surface Ships	191	15	198	19	203	22
Submarines	<u>72</u>	<u>8</u>	<u>77</u>	<u>8</u>	<u>86</u>	<u>8</u>
Total	263	23	275	27	289	30

2. Combat System Engineering Support

Provides the planning, combat system level design, pre-installation engineering, ship overhaul, and post overhaul support for all elements of surface ship combat system conversion and modernization programs.

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	\$5,220		\$4,040		\$4,146	
=====						
Efforts Funded						
a. Pre-Installation Eng Spt. (Workyears)	3,122	45	2,389	35	2,495	36
b. Ship Integrated Def. portions of Comb. Systems Ship Qualifi- cation Trials (# trials)	686	9	618	10	618	9
c. Training and Documentation (Workyears)	427	6.6	-0-		-0-	
d. Program Planning Cmbt Sys Management Info System (# of SHIPALT Instal- lations)	985	1,010	1,033	1,070	1,033	1,142

(Planning costs vary depending on complexity of planned SHIPALT's)

3. Close-In Weapons Support

PHALANX Close-In Weapon System (CIWS) is a fast reaction, autonomous gun weapon system introduced as a last ditch defense system to combat the cruise missile and other anti-ship missile threats. CIWS will be installed in over 300 ships. This program provides for fleet support and technical assistance to SHIPALT installing activities and ships having maintenance problems beyond the ability of the organizational maintenance personnel. In FY 1985, Block I System Testing was completed.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	\$8,591		\$7,756		\$6,906	
=====						
No. of CIWS Supported		311		373		437

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
In-service Engineering Agent Support (WY)	4,157	54.0	5,854	81.3	5,006	66.7
Fleet Operational Test & Evaluation (WY)	3,650	52.1	---			
Other Eng. Spt. (WY)	784	11.2	1,902	26.4	1,900	25.3

4. Gun Fire Control System Fleet Support

Provides engineering and logistics support for maintaining the operational readiness and safety of in-service gun fire control systems installed on over 160 combatant ships and in training facilities. Funding is provided to design safety improvements, to update technical documentation, to improve maintenance procedures, to analyze feedback data and identify reliability and maintainability problems, and for other related engineering efforts which will improve fleet performance and maintenance operations.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	\$7,061		\$7,599		\$11,076	
=====						
a. MK 86 Fire Control (systems spt)	3,920	57	4,050	58	5,099	67
b. MK 68/56 Fire Control (sys supported)	2,150	106	2,697	106	3,948	106
c. Gun Ship Qualification Trials	490	27	509	26	515	24
d. Battleship GFCS	-		-		500	24
e. Guided Projectile	-		-		529	
f. Night Vision Devices	226		165		300	
g. Gun Fire Accuracy/Rangetable	275		178		185	

5. Weapons Control Switchboard/IC Tech Support

This program supports changes in weapons control switchboards which are the result of updating weapons systems. Increase in this program will be used to provide support for ISEA fire and smoke detectors, Life Cycle Support facilities Inter-Voice Communications System (IVCS) and Interior Communications (IC) test and evaluation agent. The expansion of Fleet IC assets, associated with the reactivation of battleships and the introduction of new ship classes such as DD-963 and FFG-7, dictates increased engineering support and maintenance assistance.

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

	FY 1985 \$ / WY	FY 1986 \$ / WY	FY 1987 \$ / WY
Total Funding	931 15.5	1,470 23.3	1,837 28.1
=====			
Total Eng. Services for Weapon control Swbs	931	941	1,176
In-Service Eng. Spt for Voice IC		529	661

6. Explosive Ordnance Disposal/Swimmer Weapons Systems (EOD/SWS)

This program provides the forces of all military services with the documentation, in-service engineering support, and equipment maintenance required to accomplish their EOD missions. The swimmer weapons support program provides engineering and maintenance services for unique explosive weapons and ordnance equipment required by Navy Special Warfare units for missions in hydrographic reconnaissance, underwater attack, and direct action. Swimmer Weapons Systems efforts realigned to INSPECWAR in FY 1986 and outyears.

	FY 1985 \$ Units	FY 1986 \$ Units	FY 1987 \$ Units
Total Funding	7,445	7,830	5,132
=====			
a. Maintain EOD Manuals (WY/manuals)	1,366 19/1,075	1,400 19/1,090	1,442 19/1,095
b. ISEA (WY/actions)	2,655 38/993	1,515 21/956	1,570 24/775
c. Maint. of systems (WY/systems)	1,084 12/127	290 3.2/102	520 5.7/250
d. Safety Mod. of SWS devices (WY/mod)	40 1	- -	- -
e. Logistic Spt. (WY/tasks)	101 1.8/3		-
f. Provide EOD list tools (sets of tools)	350 49	-	-
g. Retract Willow	1,619	4,000	1,600
h. Materials for Fleet Intro/Trg EOD Sys	230	625	-

7. Gun Weapons System Fleet Support

Provides engineering and logistics support to maintain the operational readiness and safety of in-service gun systems installed in combatant ships and training facilities. Funding is provided to improve the system design, to provide additional safety protections, to update technical documentation, and to improve maintenance procedures.



Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	4,428		4,982		6,179	
a. Minor Caliber Weapons	631	843	797	902	1,151	1,054
b. 3"/50 Gun Sys	550	209	605	207	642	200
c. MK 75 Gun Sys	780	62	858	69	1,070	80
d. MK 45 Gun Sys	920	106	1,008	108	1,230	114
e. Mk 42 Gun Sys	1,285	127	1,410	127	1,498	127
f. 5"/38 Gun Sys	140	71	152	78	321	78
g. 16"/50 Guns	122	19	152	28	267	28

8. Mine Warfare Engineering Support

Provides funding for the following functions for in-service mines and destructors and mine countermeasures: (a) analysis of hardware, operational employment, and delivery vehicle interface deficiencies; (b) development and evaluation of corrections for deficiencies; and (c) liaison with fleet units to assess equipment performance and operational employment status (units are technical projects).

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	2,106	46	3,193	65	2,361	52
MCM Components	622	11	774	13	*	
Mine Maintenance Support						
Mine Systems	628	9	924	17	939	16
Mine Comp/Equip	410	12	924	14	830	13
Ballistics	95	1	109	2	113	2

\* Transferred to O&M,NR, MCM Equipment Support in FY 1987 \$1,604 thousand.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
PHS&T	100	5	137	6	148	7
Propellants	76	5	91	6	87	6
Batteries	175	3	234	7	244	8

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

9. Sonar Systems

Provides funding for (1) Surface Sonar Systems, (2) Submarine Sonar Systems, and (3) Sonar System Command and Control.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Total Funding	<u>\$4,975</u>	<u>\$5,564</u>	<u>\$7,764</u>

a. Surface Sonar Systems

The LAMPS MK III is an integrated aircraft and shipboard weapons system. This program provides the operation and maintenance support for the sonars, data links & other data handling display and communication equipment on the 38 installed systems, 4 mobile team training units (MTTU), and 6 land based test sites (LBTS) which will be operational in FY 1987.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	<u>\$</u> <u>Units</u>	<u>\$</u> <u>Units</u>	<u>\$</u> <u>Units</u>
Funding	3,400	4,045	5,931
No. of LAMPS systems supported	25	34	48
In-Service Engineering & Technical Support	<u>2,500</u>	<u>2,810</u>	<u>3,713</u>
LAMPS System	1,460	1,560	1,738
AN/SQQ-28	540	800	1,250
AN/SRQ-4	500	450	725
Interim Depot Support	<u>238</u>	<u>100</u>	<u>143</u>
MTTU Support (No. of MTTU)	<u>200</u> 2	<u>450</u> 2	<u>775</u> 4
LBTS Maintenance Support (No. of LBTS)	<u>312</u> 4	<u>335</u> 4	<u>875</u> 6
Program Management	<u>150</u>	<u>350</u>	<u>425</u>

b. Submarine Sonar System

Provides life cycle support for the AN/BQR-15 and AN/BQR-19 Sonar Systems, including performance evaluation, on-call services, parts repair and repair management for these sonars installed on the two operational SSN-608 Submarines.

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

Funding	FY 1985 \$473	FY 1986 \$459	FY 1987 \$464
=====			
Number of Operational Sonar Months	24	24	24

c. Sonar System Command and Control This program provides in-service engineering support for all underwater acoustics communications equipment in the Fleet (including the AN/WQC-2A, underwater telephone), installation of Probe Alert equipment, and installation of technical improvements to underwater acoustic communications equipment.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	1,102		1,060		1,369	
=====						
a. Probe Alert Fleet support	300		315		415	
b. Probe Alert Inst. (Number of installations)	510	64	446	55	519	65
c. Fleet Support for Other Acoustic Communications	252		284		310	
d. AN/WQC-2A Change Installations (Number of installations)	40	14	15	6	125	30

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

B. SUBMARINE SYSTEMS SUPPORT

1. Submarine Noise Reduction

The Submarine Noise Reduction Program has two objectives: (1) sponsor/fund an acoustical trials program, and (2) sponsor/fund state-of-the-art engineering investigations and technical support tasks.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	13,817		10,451		7,578	
Acoustical Trials	10,512	25	7,695	20	6,581	15
Engineering Invest. & Study Tasks	3,305	30	2,756	30	997	5

2. Deep Submergence Systems Program (DSSP)

Provides engineering, technical, and logistical efforts in support of Fleet capabilities for submarine rescue, deep ocean search, inspection, and object recovery. Vehicles utilized in these efforts and supported by this account are Deep Submergence Rescue Vehicles (DSRVs, 2 craft); ASR-21 Submarine Rescue Support Ships (2); Deep Submergence Vehicles (DSVs, 2); the USS ELK RIVER (IX-501) saturation diving training ship; the USS POINT LOMA (AGDS-2) DSV/DSRV Support Ship; and the NR-1, a nuclear-powered research and oceanographic submarine. The program also supports the engineering and technical efforts of the Unmanned Vehicle System.

	FY 1985		FY 1986		FY 1987	
	\$	Missions	\$	Missions	\$	Missions
Total Funding	16,062		14,808		16,674	
DSRV (2 craft)	6,376		6,274		7,677	
Logistic Support	1,049		1,172		1,300	
Engineering Spt	2,873		2,700		3,515	
Phased Modernization*	2,454		2,402		2,862	

\* Provides for engineering design, testing, and vehicle integration efforts to extend DSRV service life.

ASR-21 Submarine Rescue Support Ship (2 craft)	1,855	972	1,088
ILS	105	86	93
Planning Yard Services	1,597	760	788
Navy Laboratory Spt	111	59	107
PERA/Tech. Services	42	67	100

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

	FY 1985 \$ Missions		FY 1986 \$ Missions		FY 1987 \$ Missions	
DSV (2 craft)	2,360	*50	1,584	75	1,772	75
Planning Yard	575		577		641	
ILS	110		144		156	
Advance Design						
Services	416		191		650	
Detailed Design	1,259		543		175	
DSV-4 Mod						
Services			129		150	

\*DSV-3 (TURTLE) in overhaul for fire damage repair (FY 1985).

Dedicated Manned/ Unmanned Vehicle Support	660	624	699
--------------------------------------------------	-----	-----	-----

Provides specialized mission support to DSV-3, 4, and Alvin (contractor-operated) through Woods Hole Oceanographic Institute and Scripps Institute of Oceanography.

NR-1	2,575	26	2,523	30	2,924	33
Sensor Systems Spt	300		300		350	
Tow Ship Spt	300		300		364	
Planning Yard Spt	665		600		600	
COSAL	415		115		200	
Equipment Repair	-		400		400	
NAVSEA Consumables	55		140		150	
Tech Doc/Eng Design	770		591		780	
ILS	70		77		80	
ELK RIVER (IX-501)	455	*2	249	*2	123	*2
ILS	30		-		-	
Planning Yard	425		249		123	
(*units are classes)						
POINT LOMA (AGDS-1)	430	18	338	16	-	-
Planning Yard	198		52		-	
Tech Support	142		190		-	
ILS	90		96		-	
Unmanned Vehicle Sys	1,032		720		900	
Design/Mat'l Def	716		544		530	
Laboratory Support	75		17		50	
ILS	60		59		60	
Tech. Doc. Prep.	125		50		210	
Mission/Ops Eval.	56		50		50	

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$ Missions		\$ Missions		\$ Missions	
Deep Sea Program	-	-	1,332	5	1,491	5
Support Ship Charters	-		620		520	
Special Equipment Lease	-		419		471	
Logistic Support	-		220		200	
Mission Evaluation	-		73		300	
<u>Submarine Personnel</u>						
Rescue	319	-	192	-	-	-
Engineering Support	207		63		-	
Lab Support	87		100		-	
ILS	25		29		-	

C. SURFACE SYSTEMS SUPPORT

1. Inspection/Testing

Provides support to improve hull, mechanical, and electrical (HM&E) material readiness through a comprehensive testing program. Program goals include increasing the number of available sources for parts/equipments through an increased number of Qualified Products List (QPL) tests to create greater competition and cheaper prices, early identification of design problems through tests on failed material, verifying that material in stock has not degraded through appropriate tests, and tests on special interest items such as diesel engines and instrumentation.

	FY 1985	FY 1986	FY 1987
Total Funding	\$1,936	\$2,104	\$2,900
=====			
Output (Number of Tests)	1,698	1,852	2,550

Note that test costs may vary depending on complexity of test subject.

2. Ship Design Technical Requirements Documents

Program involves six major efforts:

General Specifications - Keep general specifications for ships current, Units are the number of sections of the General Specification Reviewed/Updated.

Standard & Type Drawings (S/T DWGs) - Prepare, maintain and update S/T DWGs needed for acquisition of equipment, systems and components used on ships. Units are the number of S/T DWGs prepared or updated.

Design Data Sheets (DDS) - Prepare and update DDS that cover standard design processes that are used by engineers and to control contractors' ship design effort. Units are the number of DDS's prepared or updated.

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

Specification Control Systems - Maintenance of computer data base for the 9,000 standard acquisition documents controlled by NAVSEA and the 5,000 prepared outside NAVSEA which require NAVSEA review. Data base contains revision of priorities for documents, cost of updating, and progress of documents being updated. Units are the numbers of major changes to the data base.

Technical Data Program - Upgrade, promulgate, consolidate, maintain Data Item Descriptions (DID's) for data required by NAVSEA specifications. Also, eliminate DID's no longer required. Units are the number of DID's upgraded or eliminated.

13-Digit Documents Conversion - This effort is to convert technical requirements documents (welding, material identification, etc.) that are in the uncontrolled series, and non-standard format to a standard series. Units are the number of document conversions initiated each year. There are currently 54 documents still to be converted. The effort should be completed in FY 1992.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
TOTAL	1,680		1,742		2,037	
Gen. Specs	100	5	100	5	100	5
Standard & Type						
Drawings	781	116	915	63	1,227	84
Design Data Sheets	50	3	100	3	100	3
Spec Control Sys	350	60	420	65	430	62
Tech Data Program	279	241	87	75	80	69
13-Digit Document						
Conversion	120	8	120	5	100	4

3. Ship Systems Engineering (SSE)

The program consists of seven discrete functional areas:

Materials Engineering primarily funds the Shipboard Corrosion Control Program which reduces shipboard corrosion and related fleet maintenance, with attendant reductions in life cycle cost and material reliability, and increases in time available for crew training. The pilot program on the USS CUSHING (DD-985) yielded annual savings of 4,000 mandays per ship, which equates to cost avoidances of approximately \$1,000,000 per ship. This effort resulted in sailors being able to spend more of their time performing mission essential requirements as opposed to performing general maintenance tasks.

Hull provides life cycle engineering support to critical shipboard hull systems. The main goal is the reduction in the number and duration of hull related CASREPS and improvement in personnel safety/protection. Systems supported are only those whose failure would be most detrimental to operational capabilities.

Auxiliary, by means of early detection and expedient resolution of auxiliary equipment problems, provides increased reliability and maintainability of mission essential systems/equipment with a tangible decrease in Fleet CASREPS. Program affects only problems in high priority equipment. In 1984 CASREP reduction was experienced in equipments covered by this program such as pumps (-8%), air compressors (-8%), and blowers (-35%).

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

Propulsion provides for engineering and technical support of propulsion related systems. The main effort is the Boiler Overhaul Improvement Program in which planning and quality assurance are improved by better definition and execution of repairs resulting in shorter, less expensive, higher quality overhauls. Propulsion systems covered, and their FY 1984 CASREP totals, include steam turbines (852), diesel engines (610), boilers (533), distillers (93), and bearings (47).

Damage Control provides near term survivability improvements for existing ships against the threat of fire, chemical warfare, flooding, electromagnetic pulse, insensitive munitions, the hazards of toxic chemicals and unsafe equipment and procedures. Corrective actions are based on lessons learned from shipboard experience and perceived weaknesses to known threats. There are 10 discrete areas in the program: 1) General Damage Control (DC) - Ship Damage Lessons learned, DC/Firefighting working groups, and DC equipment and systems support; 2) Flammable Liquid Stowage; 3) Other Equipment - Personnel, protective, survival and rescue equipment; 4) Personnel Chemical Defense Equipment; 5) Naval Firefighters Thermal Imager; 6) Hazardous Material Stowage, Ship safety criteria/lessons learned, SafeRec Program; 7) DC Interior Communications support; 8) Compartment Tightness Testing; 9) Fire Protection; and 10) Sonar Bow Dome Life Cycle Management.

Electrical provides for engineering solutions to electrical problems identified by the Fleet, CNO, and by CASREPs. Provides fixes to solve problems between electrical power and combat systems identified by the Electrical Power Interface Compatibility (EPIC) program. Other equipment whose electrical problems are being solved are the 400 HZ MG Set, Circuit Breakers and Electrical Distribution and IC Sensor Systems. Electrical accomplishes its mission by revising technical manuals, developing repair standards, providing modification kits and providing solutions to electrical CASREP reports. New starts in FY 1987: 1) Degaussing - life extension and maintenance reduction modifications of degaussing systems on CG, CGN, DDG and LPD ships (69 ships total); 2) 60/400 Hz - solution of the problem of the 60/400 Hz frequency changer, which when overloaded does not trip standard circuit breakers, thereby shutting down main combat power systems; and 3) DDG 993 2000KW generator - generator provides inadequate power to run all the new or upgraded equipment onboard the DDG 993.

Electrical - Fiber Optics - To develop standards, specifications and test procedures for the emerging Fiber Optics technology. This technology has excellent potential for improving the combat readiness of U.S. Navy ships by providing; weight reduction, Electro Magnetic Interference (EMI) and Electro Magnetic Pulse (EMP) immunity, and improved survivability and reliability. All shipboard systems will be investigated for the potential application of Fiber Optics technology.

DD 963 Class Senior Navy Steering Board (SNSB) - Identifies and oversees correction of technical problems arising on DD-963 and, starting in FY 1987, FFG 7 class ships. There are 5 main efforts: 1) Independent Design Review - Analysis of major technical problems at SNSB direction; 2) Waste Heat Boiler problem solutions; 3) FFG 7 - Analysis and correction of FFG 7 superstructure cracking and 60 HZ system problems; 4) Bleed Air System deficiency correction and establishment of in-house repair capability; and 5) High Pressure Air Systems - equipment and logistics improvements. FY 1987 other consists of Seawater service system improvements (50) and a new start for the DD 963 400 Hz (25).



Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	17,919		21,069		40,173	
-----						
Materials Eng.	1,647		1,467		3,660	
Corrosion Control	1,443		1,311		3,501	
Mandays avoided/ship		1,800		1,955		4,582
Other	204		156		159	
Hull (Units = #	1,357		1,650		1,737	
Tess CASREPs, unless noted)						
ASROC Wpns Handling	260	62	262	62	200	78
HARPOON Re-arming	100	0	200	63	0	0
Synth. Rope (Inj Red)	200	2%	200	2%	200	2%
LHA Spt (APLs Upgraded)	129	13	0	0	130	13
Ship Cont (APLs Upgrad)	153	15	200	20	200	20
Terrier Transfer Car	166	31	150	31	266	56
Boat Handling Sys	0	0	60	12	100	19
Deck Systems	0	0	0	0	200	63
Stern Gates	143	-	56	-	119	-
KEVLAR	0	0	141	2%	125	2%
Other	206		381		197	
Auxiliary	7,048		5,246		7,083	
DART Aux Equip Spt	2,887		2,310		2,358	
CASREPT Reduction		-5%		-3%		-3%
Mean Downtime						
Reduction		-5%		-3%		-3%
Other Aux Equipment						
Spt	4,161		2,936		4,725	
Propulsion	3,742		4,824		7,065	
Steam Prop Eq (Ao)	0		100	+10%	135	+10%
Dist Plnt Imprv	0		0		640	
Boiler OH Improv	3,742		4,096		4,748	
Cost Avoid (\$Ms)		23		25		35
Noise Quiet Brngs	0		0		200	
Sub Diesel Engines	0		0		700	
Shaft seals cor	0		512		642	
Prop Cont Sys						
Comp Imp (Ao)	0		116	+25%	0	

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

Damage Control	<u>0</u>		<u>2,204</u>		<u>5,054</u>	
(Units = % red of injury unless noted)						
General Damage control	0	0	482	3%	840	3%
Flammable Liq Storage	0	0	0	0	540	1%
Other Equipment	0	0	231	3%	520	5%
Pers Chem Def Equip	0	0	1,047	5%	1,103	5%
Thermal Imager						
(# suprted)	0	0	0	0	159	112
Hazard Matl Stowage	0	0	0	0	550	5%
Interior Comm Spt	0	0	0	0	239	1%
Compartment Tight Test	0	0	324	1%	810	1%
Fire Protection	0	0	120	1%	130	1%
Bow Dome	0	0	0	0	163	
Electrical	<u>2,472</u>		<u>1,715</u>		<u>5,460</u>	
400 HZ	78		0		0	
Degaussing	0		162		400	
Circuit Breakers	284		306		354	
EPIC	1,289		585		1,016	
60/400Hz Continuity	0		0		1,076	
Electrical Sys Spt	655		662		1,167	
Magnetic Minesweeping	166		0		0	
2000 KW Generator Spt	0		0		1,447	
Electrical-Fiber Optics	<u>0</u>		<u>3,300</u>		<u>10,000</u>	
Engineering Design/Development	0		800		3,300	
Standards and Specifications Development	0		1,000		2,000	
Test/Evaluation and Validation Spt Facility	0		600		1,700	
Sensor Deveopment	0		400		800	
Installation, Damage Control and Repair	0		500		2,000	
Integrated Logistic Spt	0		0		200	
DD 963 SNSB	<u>1,653</u>		<u>663</u>		<u>114</u>	
IDR complt/initiated	328	1/2	0	0/0	0	0/0
Waste Heat Boiler	320		180		0	
FFG-7	0		0		114	
Bleed Air System	630		188		0	
HP/LP Air System	267		250		0	
Other	108		0		0	
SW Service System	0		45		0	

4. Steam Propulsion Plant Improvment Program

This program provides management and overall coordination required to eliminate deficiencies in training, personnel, engineering design, material, and logistic support of steam propulsion plants for surface ships. Functional areas that comprise this effort are: (A) Engineering Operational Sequencing System (EOSS) which provides procedures for operating propulsion plants in routine steaming

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

and specific casualty modes; (B) EOSS Maintenance which is the operation of the EOSS library and a feedback/update system to maintain EOSS installations; (C) Training Support is the depot level repair of boiler hot plants, technical update of school curricula, and control system training of ship forces afloat; (D) Documentation Support which improves supply support, updates and enhances technical manuals and documentation for maintenance and training; and (E) Technical Support which develops engineering improvements in steam propulsion systems, components, and procedures to enhance operability, reliability, safety, and maintenance resulting in a longer useful shipboard life.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	8,931		5,725		8,379	
=====						
1. EOSS						
Development/# Ships	3,302	47	903	11	0	
2. EOSS Maint./#	3,059		2,017		3,035	
Feedback Reports		8,350		5,500		8,400
3. EOSS Library						
Standardization	525		720		1,210	
4. Training Support	222		680		1,200	
# Work Yrs.		2.9		8.9		15.2
5. Documentation Spt	429		405		1,000	
6. Technical Spt	1,394		1,000		1,934	

Improves the reliability and maintainability of Underway Replenishment systems through standardization and simplification alterations, reprovisioning actions, and training and technical documentation revisions. Develops safety and performance improvements for elevators, cranes, hoists, similar logistic/handling operations. Corrects Fleet's and Inspection and Survey Team's identified deficiencies by improving integrated logistic support and data production.

5. Underway Replenishment (UNREP)

	FY 1985		FY 1986		FY 1987	
	\$	QTY	\$	QTY	\$	QTY
Total Funding	11,883		5,160		6,044	
=====						
Aircraft Elevator	361		721		138	
Reduct. of CASREPTS						
per year	250	7	286	9	63	2
Reduct. in Parts Delay						
(days)	11	6	54	7	7	4
Reduct. in Maint. Time						
(days)	15	16	86	12	11	14
Reduct. in Repair Time						
(days)	85	11	295	15	57	10
Current Ao = 0.875						
Goal Ao = 0.950						

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	QTY	\$	QTY	\$	QTY
<u>Cargo/Weapons Elevator</u>	<u>9,648</u>		<u>2,133</u>		<u>3,500</u>	
Ao Goal						
CV = .90		.83		.81		.83
UNREP = .95		.89		.89		.89
<u>Standard Replenishment Along Side Method</u>	<u>1,072</u>		<u>911</u>		<u>1,115</u>	
<u>Reduct. in CASREPT per year</u>	1,072	16	911	10	1,115	15
<u>Increased Sys. Availability (Ao)</u>						
Program Initiation Ao = 0.582;						
Current Ao = 0.852;						
Goal Ao = 0.892						
<u>Vertical Conveyor Reduce Personnel Injuries</u>	<u>533</u>	-1	<u>550</u>	-2	<u>550</u>	-2
<u>AO/AR Crane Support Crane Cert./# of tests</u>	<u>269</u>	18	<u>845</u>	71	<u>741</u>	62

6. Habitability

Provides physical working conditions and personnel support facilities which support ship/fleet readiness and prevent excess expenditures in accomplishing fleet improvements. This effort increases personnel retention rates, ensures that expenditures result in functional vice cosmetic improvements, and ensures that materials/equipment/ furniture installations meet regulated standards and have adequate in-service engineering support.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	445		371		502	
=====						
Updates of Design 1/ Procur. Guidance	50	1	-	-	-	-
Ships receiving assistance (Cumulative)	-	100	-	-		
Furniture/Equip ISEA Support 2/	395	285	371	270	502	335

1/ Includes In-Service Engineering Support

2/ Mainly furniture and office equipment. (Includes medical, dental and food service equipment)

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

7. Ships Trials & Tests

Funds inclining experiments and engineering solutions to ship hardening problems.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Total Funding	\$5,081	\$4,747	\$6,112
	=====	=====	=====

a. Ship Hardening Program

Provides management guidance and technical support to apply lessons learned from ship shock tests by developing engineering fixes for proven highest priority shock hardening deficiencies for existing ships and equipment and modifying Specifications and Standards for improved future designs. Examples of actions taken include: (1) MK 45 Light Weight Gun SHIPALTs and ORDALTs have been prepared to shock harden this system on ship classes (CG 47, CGN 38, CGN 36, DD 963, DDG 993, LHA 1), for a total of 47 ships; and (2) MK 86 Gun Fire Control System corrective actions on seven ship classes that potentially involve 71 ships. The probability of Battle Group Ships being rendered combat ineffective by shock damage can be significantly decreased when the developments of the Ship Hardening Program are installed. Thus, further delay of corrective action seriously affects Fleet survivability. The funding provides engineering fixes for the top 20 shock-related deficiencies identified in the "U.S. Navy Ship Hardening Plan-Shock." These requirements will increase as more ships (LSD 41, LHD 1, MCM 3, CG 53) are shock tested and shock hardening deficiencies are identified.

	<u>(\$000)</u>		
1) Shock Readiness Training	45	100	450
2) Specifications & Standards	115	100	100
3) Electric Power Reliability	322	461	1,526
4) CV 67/CG 48/Future Test Follow-up	1,268	1,406	1,069
5) Interlock & Protective Circuits	70	200	200
6) Gun Systems	660	350	0
7) Mast-Mounted Equipment	430	485	350
8) Missile Systems	0	240	500
9) Communications Systems	0	0	200
10) Shock Coordinator	528	346	355
TPTA:	3,438	3,688	4,750

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

b. Inclining Experiments

Program provides funds to perform inclining experiments on ships in the active fleet. These experiments determine displacement and center of gravity data necessary to ensure that ships do not exceed architectural limits. Historical data indicate unexpected and unaccounted for increases in displacement and rises in the center of gravity in spite of measures designed to control such growth. Exceeding the stability, buoyancy, or strength limits threatens survivability in high seas. Flooding caused by weapon damage, grounding, or collision will have a significant impact on survivability.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Inclining Experiments	938	12	964	11	1,240	13

c. Survivability Review Group (SRG)

SRG identifies changes in ship design practices, specifications and standards which will enhance the resistance of ships to damage by enemy weapons and provide directions to survivability-related R&D. The product of this program is a number of ship class reports beginning with FFG class.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
1) Combat Systems Rev	150		-0-		-0-	
2) HM&E System Rev.	250		-0-		-0-	
3) Vulnerability Asses.	155		-0-		-0-	
4) Documentation	150		-0-		0	
TOTAL	705		0		0	

d. Ship Survivability

Ship Survivability develops self-help projects and drawings to upgrade shipboard damage control readiness. This effort also supports the OPNAV damage control/firefighting work group.

	FY 1985	FY 1986	FY 1987
Damage Control Projects	-0-	\$95	\$122

D. ELECTRONIC SYSTEMS

1. SEMCIP/EMI Control

Shipboard Electromagnetic Compatibility Improvement Program/Electromagnetic Interference provides corrective action to ships in the fleet to rectify onboard electro-magnetic compatibility (EMC) and interference (EMI) problems which degrade mission warfighting capability and are beyond the capabilities of a ship's force to diagnose and repair.

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987
	\$	Units	\$	Units	\$
Total Funding	15,568		15,276		15,063
=====					
Efforts Funded:					
EMC Improvement	5,275		5,400		5,400
Ship Surveys (EMC)		10		10	
Problem Investigation		110		140	
Radiation Hazard Surveys		15		36	
					120
					20

EMC Improvement provides quick engineering maintenance response to EMI problems, full scale surveys, documentation of problem investigation and resolution management.

Waterfront Corrective Action Program (WCAP) (including Carriers)	5,188		5,113		5,100
Tech Assists		175		170	
Shipboard Training		210		200	
Readiness Assessment		110		85	
					170
					200
					100

Provides pre-deployment corrective action and quick response to ships and submarines with operationally degrading EMI problems.

Industrial EMC	2,793		2,718		2,700
Ships Events		40		72	
					72

Improves ship repair in industrial process through training, surveys, documentation, and repair practices.

Combat System/Surface-Air Frequency Management Program (CSFMP/S-AFMP)	1,000		765		760
Updates		70		55	
					55

Provides frequency management EMC criteria for surface missile systems/ships deployed in task force/multi-ship EM environment to prevent missile loss and homing on friendly forces. Provides EMC criteria for frequency management of ship-to-air radar systems which degrade due to EMI.

Electromagnetic Readiness	1,219		1,200		1,103
Ship INSURV Spt		145		145	
Ship Discrepancy Documents		130		125	
					140
					129

Provides EMI support to INSURV during acceptance trials and deficiency documentation.

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	\$ <u>Units</u>	\$ <u>Units</u>	\$ <u>Units</u>
Shipboard Electronic System Eval Fac	93	80	-

2. Electronic Test and Repair

The Electronic Test and Repair Program provides for Navy automatic testing requirements, miniature/microminiature emergency repair capability for printed circuit board (PCBs) and identification and life cycle management of all Test Measuring and Diagnostic Equipment (TMDE) at the organizational and intermediate maintenance levels.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	\$ / WY	\$ / WY	\$ / WY
Total Funding	612 7.8	1,533 19.1	2,581 30.3
=====			
a. 2M Electronic Repair	440 5.6	605 7.7	1,303 15.9
b. TMDE Eng.	- -	566 7.2	888 10.0
c. Test Equipment Management Information System	- -	362 4.2	390 4.4
d. Automatic Test Equipment	84 1.1	- -	- -
e. Standard Electronic Module	88 1.1	- -	- -

3. Navy Tactical Data Systems

Provides in-service support to the fleet for existing and new tactical data systems. Each of the 157 NTDS ships has an average of 110 individual NTDS equipments. Efforts funded include: distribution and validation of maintenance and test software for NTDS hardware; maintenance engineering, such as maintenance of NTDS ship configuration profiles; reliability and maintainability reviews; technical manual development and reviews, and field change developments, reviews and verifications.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	\$ <u>Units</u>	\$ <u>Units</u>	\$ <u>Units</u>
Total Funding	2,768	2,094	3,183
No. of Ships Supported	147	152	157
=====			
Maintenance/Test Program	760	520	1,020
Updates	4	0	2
Test Program Modifications	-	1	3



Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987
	\$	Units	\$	Units	\$
In-Service Eng.	1,833		1,439		2,028
Field Changes Implemented		29		15	
Fleet Readiness Visits		52		52	
Configuration Audits		12		-	
New Equipment Introduced		-		-	
Combat System Maint.					
Training Facility Engineering (Work-years)	175	3.0	135	2.0	135
					2.0

E. TECHNICAL PUBLICATIONS

1. Technical Publication

The technical publications office administers the acquisition and maintenance of over 150,000 technical publications (included are both technical manuals (TM) and engineering drawings). Technical publications describe the operation, maintenance and repair procedures for shipboard equipment. For the ships force to properly operate, maintain and particularly repair shipboard equipment there must be a complete and up to date allowance of technical publications aboard each ship. The typical allowance for a destroyer is approximately 1000 different manuals. Land based repair facilities also depend on technical publications to perform a higher level of repair. Without appropriate technical manuals, equipment down time increases and the fleet incurs unnecessary repair costs. The program has three elements:

Technical Manual Management Program

1) Advance Change Notices, Technical Manual Deficiency Evaluation Reports, (ACN/TMDER) resolves approximately 1600 fleet submitted deficiency reports yearly by issuing a change to the TM when life or safety is involved or adding the reported deficiency to the TM deficiency list for future update. In addition, converts 1000 advance change notices into permanent changes yearly.

2) The Engineering Drawing Management Program (EDMP) - manages and controls three NAVSEA engineering drawing repositories which store, update, and distribute engineering drawings and indexes; maintains microfilm of indexes; propose revisions to MIL-SPECs, standards for the microfilming of drawings; and processes all requests for drawings - providing 35 million drawings per year. Current inventory is approximately 28 million drawings on microfilm.

3) Technical Manual Program Support - provides distribution lists (8200), mailing labels (1500), Technical Manual Identification Numbers (8800), stock actions (5000), processes fleet requests (9500), coordinates reprints (6800); controls retention of master copies; administers the Technical Manual Quality

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

Control Program; produces TM Contract Requirements; participates in TM reviews, validations, verifications, QA audits and post distribution audits; TM research for the Integrated Logistics Overhaul Teams; coordinates Technical Manual Specification and Standards program and TM contract requirements for Technical Repair Standards; develops software enhancements to the management information system; and maintains the Naval Ships Technical Manual (100 Chapters), Engineering Information Bulletin (26 issues), Electronic Installation Maintenance Book (13 volumes).

b. Reprint Program

The program stocks over 80,000 technical manuals. Provides 6,800 reprint actions consisting of 400,000 copies per year.

c. Technical Manual Update Program

Funding increases over the FY 1985 and 1986 funding levels will be used to update technical manuals. Beginning in FY 1987 over 1400 critical technical manuals require updating at a cost of almost \$90 million. Each year an additional 225 technical manuals costing \$14.6 million require update. The goal is to eliminate the backlog of updates by 1991. Updating these deficient critical technical manuals will improve shipboard equipment availability, since sailors will have accurate technical information to expeditiously operate, troubleshoot, and repair critical shipboard systems. Repairing a piece of sophisticated equipment without a correct technical manual is a frustrating and expensive task. Without accurate technical manuals the sailor is relegated to correcting the problem using a "smoking box" approach. He replaces a part or series of parts and turns the equipment on. If the equipment works it is repaired; if not the previously replaced parts plus a few more must again be replaced. It is conceivable to expend more on spare parts than the equipments' value. When the shipboard allowance of parts are expanded, the equipment is down until more parts are procured and possibly a technical consultant is sent to assist ships force repair. The cycle repeats itself because we have not spent, on a one time basis, an average of \$65 thousand to update the technical publication. Such a hit or miss approach to repair has been costly in spare parts, equipment and manpower resources.

	<u>FY 1985</u> \$      Units	<u>FY 1986</u> \$      Units	<u>FY 1987</u> \$      Units
Total Funding	19,927	17,737	43,473
	=====	=====	=====

Key elements of the program are updates, reprints and technical manual management.

a. Technical Manual Management Program

	<u>FY 1985</u> \$      Units	<u>FY 1986</u> \$      Units	<u>FY 1987</u> \$      Units
1) ACN/TMDER	2,700	2,700	2,700
Conversions			
# TMDER	500	500	750
# ACN Conversion	1,000	1,000	600

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987
	\$ Units		\$ Units		\$ Units
2) EDMP	1,310		1,300		1,400
3) Technical Manual Program Support	8,411		9,269		10,500
b. Reprint	2,700		4,468		5,000
# Reprinted	3,207		5,949		6,800
c. Update	4,806		0		23,873
# TMs	66		0		367
Updated					
# Backlog	1,180		1,405		1,263
end of year					

F. COMBAT SYSTEMS SUPPORT

1. Joint Logistics Command Government/Industry Data Exchange Program (GIDEP)

Provides for acquiring, storing, retrieving, and disseminating test and usage information on parts and components. This information is maintained in specialized data banks which are available to both government and industry.

	FY 1985		FY 1986		FY 1987
	\$ Units		\$ Units		\$ Units
Total Funding	941		327		974
=====					
Tech. reports processed	2,456		850		2,400
Microfilm reels processed	30		11		30

2. Total Ship Testing Program

Provides ship construction test methodology necessary to ensure adequate testing of combat, command and control, and hull, mechanical, and electrical TSTP systems. Also provides for review of ships undergoing conversions, modernization, or overhaul to determine the need for structural test firings.

	FY 1985		FY 1986		FY 1987
	\$ Units		\$ Units		\$ Units
Total Funding	1,972		2,167		4,817
=====					
Efforts Funded					
a. TSTP/SP	374		392		386
Guidance Manual					
Updates	7		8		7
TSTP Training					
Courses	5		3		3
T&E Documentation					
Management	5		8		8

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
b. <u>Combat System</u>	<u>1,187</u>		<u>1,112</u>		<u>1,230</u>	
<u>Industrial Test</u>						
Test Directors/off site		12		6		8
Test Directors/on site		0		7		7
c. <u>Structural</u>	<u>111</u>	5	<u>100</u>	5	<u>100</u>	5
<u>Test Firing</u>						
d. <u>Combat System</u>						
<u>Readiness</u>						
Reviews & Tests	<u>200</u>		<u>200</u>		<u>200</u>	
Readiness						
Assessment						
Procedures		100		100		100
e. <u>Overall Combat System</u>						
<u>Operability Test</u>	<u>100</u>		<u>95</u>		<u>100</u>	
Revisions		3		3		3
Technical						
Corrections		9		9		9
Implementation						
Visits		3		3		3
f. <u>Combat System</u>			<u>268</u>		<u>1,201</u>	
<u>Technical</u>						
<u>Operations</u>						
<u>Manuals</u>				3		17
g. <u>Combat Simulation</u>						
<u>Test System</u>					<u>800</u>	
h. <u>Shipboard Electronics</u>						
<u>Systems Evaluation Facility</u>					<u>800</u>	

3. In-Service Explosives

This program performs two functions: 1) develops test and engineering procedures for explosives and 2) supports the National Authority for Explosives to the NATO Ammunition Group. This group develops standards and procedures for ammunition and other explosives. Funds support personnel at White Oak and Yorktown who develop required standards and procedures.

	FY 1985		FY 1986		FY 1987	
	\$	Workyears	\$	Workyears	\$	Workyears
Total Funding	1,266	18.8	434	4.2	379	3.8
Test & Eng	180	2.0	200	2.0	174	1.8
NATO	289	3.0	234	2.2	205	2.0
IM Support	797	13.8				

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

G. RELIABILITY AND MATERIAL HANDLING ENGINEERING

1. Ordnance Handling

Provides technical support and engineering functions to ensure safe handling, shipping, and storage of explosive ordnance. Also provides for depot level overhaul for equipment on LHA-1 class ships.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	1,067		1,407		1,681	
=====						
Efforts Funded (\$/Workyears)						
a. LHA Pallet Transporter (No. of Transporters)	93	1	820	10	825	11
b. Depot Overhaul Capability	405		-			
c. In-Service Engineering	64	0.8	240	3.0	340	4.1
d. Shipboard Handling Stowage Training	245	2.7	-		170	2.7
e. Material Handling Equip. Engineering Support	80	.8	98	1.0	82	1.0
f. Shipboard Stowage Engineering	60	.6	85	.9	95	1.0
g. Railcar/Truck/ Container Loading	60	.6	80	.8	84	.8
h. Armament and Weapons Spt Engineering	60	.6				
i. ISEA Function - LHA Pallet transporter			84	1.0	85	1.0

2. Reliability and Maintainability

Provides for the development and implementation of reliability, maintainability, and quality (RMQ) engineering programs which have common application for all ships and combat systems. Units represent a combined total of analyses on various projects within each category of the performance criteria.

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	782		513		505	
a. Acq/Design Spt # of analyses	346	23	378	23	377	23
b. Production Design Spt # of Analyses	256	26	135	12	128	12
c. Reliab & Maint # of Analyses	180	140	0		0	

H. QUALITY RELIABILITY ASSURANCE

The program establishes policies and performance criteria and provides assistance in the QA discipline to implement OSD, OPNAV, and NAVSEA guidance to assure product quality and reliability among ships and weapon systems during design, development, acquisition, operation, and maintenance.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding (\$000)	4,400		1,880		4,253	

Efforts Funded:

1. <u>NDT Training and Certification</u>	0	0	303	
a. Training Course Development (# of Courses Developed)			30	2
b. Training Course Material Maintenance (# of Courses)			25	5
c. Training Course Presentations (# of Presentations)			90	16
d. Personnel Certifications (# of Certifications)			78	39
e. Prog Manager (# of WY)			80	1
2. <u>Shipyard Quality Improvement</u>	257	490	552	
a. Improvement Initiatives (# of Implementation Assists)	257	109	225	
b. Audits of SHYD Qual (# of Audits)	8	4		7
c. Revise SHYD QA Program Documentation (# of Documentations)		381	175	8
		13	152	5

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

	\$ <u>FY 1985</u> Units	\$ <u>FY 1986</u> Units	\$ <u>FY 1987</u> Units
3. <u>SUPSHIP Quality Improvement</u>	80	178	257
a. Improvement Initiatives	80	76	97
(# of Implementation Assists)	3	3	5
b. Audit of SUPSHIP Quality		102	130
(# of Audits)		7	8
c. Revise SUPSHIP QA Program			30
(# of Docs)			1
4. <u>Laboratory Production Improvement &amp; Accreditation Program</u>	0	0	50
5. <u>Level I Material Control (SUBSAFE)</u>	50	71	115
a. Conduct Material Control Audits of SHYDS and Supplies			
(# of Audits)	4	5	5
b. Develop Improved Program Documentation and Automated Audit Results			
(# of Programs Developed)			2
6. <u>Fleet Quality Assurance</u>	37	70	0
a. Fleet QA Audits			
(# of Audits)	1	2	
7. <u>In-Service</u>	2,700	0	1,152
a. Number of ship readiness models produced	24	0	10
b. Number of equip. pieces analyzed using eng. data base	40	0	18
8. <u>ONAS Initiatives</u>	268	0	0
a. Number of initiatives achieved	1		

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	\$	Units	\$	Units	\$	Units
9. <u>Management and Training</u>	500		500		500	
a. Number of QA training exercises given		16		15		14
10. <u>Design and Production</u>	508		571		1,324	
a. Number of design analyses conducted		69		71		176

I. NUCLEAR PROPULSION TECHNICAL LOGISTICS

Provides for the continued safe and reliable operation of naval nuclear propulsion plants by funding essential inspection, refurbishment and engineering support of repairable reactor plant components installed in nuclear powered ships and by funding support of reactor refueling and reactor servicing equipment. Six naval shipyards (Charleston, Mare Island, Norfolk, Pearl Harbor, Portsmouth, and Puget Sound) provide the following types of support: (1) technical receipt inspection, refurbishment, and maintenance of Navy stock spare repairable components; (2) special handling and storage of irradiated components and equipment removed from ships; (3) inspection, modification, refurbishment and control of refueling equipment, special maintenance and support equipment and steam generator cleaning and repair equipment; and (4) special evaluations of installed reactor plant components and systems as authorized by NAVSEA.

In addition, two reactor plant prime contractors provide continuing engineering support directly related to the repair and maintenance of reactor plant components installed in nuclear powered ships. Specifically, these contractors: (1) provide technical liaison with shipyards repairing stock components or overhauling and refueling reactor plants; (2) develop field change modifications for components and equipment; (3) contract with vendors for refurbishment or modification of reactor plant components and reactor servicing equipment; (4) perform design work and engineering analyses in connection with installed components; (5) provide technical liaison with the Navy Ships Parts Control Center regarding repair parts provisioning, procurement, and quality assurance; and (6) maintain nuclear component technical manuals.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987 *</u>
Total Funding	<u>77,003</u>	<u>83,895</u>	<u>53,867</u>
Shipyard Support	29,558	29,977	30,667
Comp Prime			
Contract Spt	15,145	19,818	23,200
Laboratory Spt*	32,300	34,100	0

\* Starting in FY 1987, ongoing Naval Nuclear Propulsion Program laboratory support is funded under Operating Reactor Plant Technology.



Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria (cont'd)

J. OPERATING REACTOR PLANT TECHNOLOGY

Program transfers from Nuclear Propulsion Technical Logistics starting in FY 1987. The program funds Naval Nuclear Propulsion Program laboratory work which directly supports the operation, maintenance, testing and refueling of reactor cores and propulsion plant systems installed in commissioned nuclear-powered ships. Specifically, the laboratories provide: (1) technical support and liaison to shipyards refueling, overhauling and testing reactor plants in commissioned nuclear-powered ships; (2) reactor system protection analyses for operating nuclear propulsion plants; (3) evaluations and tests of operating naval reactor cores, core components, and plant systems; (4) technical assistance for naval reactor plant operations, resolution of operating plant problems, and evaluation of plant water chemistry control; (5) radiological and environmental monitoring, and radiation analyses; and (6) maintenance of reactor plant operating manuals and radiation control manuals. This laboratory work is essential to ensuring the continued safe and reliable operation of naval reactor plants.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Total Funding	(32,300)*	(34,100)*	44,800
=====			

\* FY 1985 and FY 1986 actually budgeted in Nuclear Propulsion Technical Logistics. Funds transfer into this line from Nuclear Propulsion Technical Logistics starting in FY 1987.

IV. Personnel Summary (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>	<u>27</u>	<u>97</u>	<u>117</u>
Officer	1	2	19
Enlisted	26	95	98
B. <u>Civilian</u>	0	0	0

DEPARTMENT OF THE NAVY  
OPERATION & MAINTENANCE, NAVY  
Exhibit OP-05

Activity Group: Contractor Technical and Maintenance Support  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Sea Systems Command

I. Description of Operations Financed

This activity group provides both contract and in-house engineering and technical services supporting maintenance and repair of all operating naval ships. It meets Fleet and Type Commanders' requests to investigate and solve problems outside of industrial availabilities.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Fleet Technical Assistance						
MOTU/CETS	10,101	10,913	10,812	9,568	10,163	595
DFS Direct Flt Support	12,748	10,434	10,799	12,186	12,169	-17
Surface Ship Support						
Surf Combat Tech Spt	5,540	3,549	3,568	3,656	7,520	3,864
CSS/ASC/Boats Tech Spt	4,384	3,303	3,342	3,246	6,741	3,495
Aircraft Carrier Support						
Arcrft Carrier Tech Spt	1,155	1,091	1,129	962	1,179	217
Submarine Support						
Sub Log & Eng Support	16,628	11,652	11,678	11,919	11,515	-404
Navigation Sys Tech Sup	<u>3,868</u>	<u>4,038</u>	<u>4,028</u>	<u>3,799</u>	<u>3,491</u>	<u>-308</u>
TOT,CNTR TECH/MAINT SPT	54,424	44,980	45,356	45,336	52,778	7,442

Activity Group: Contractor Technical and Maintenance Support (cont'd)

B. <u>Reconciliation of Increases and Decreases</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$45,336
2. Pricing Adjustments	1,717
A. Industrial Fund Rates	(101)
B. Average Grade Reduction	(-118)
C. Other Pricing	(1,734)
3. Functional Transfers	-1,273
A. Transfers-Out	(-1,273)
1) Intra-Appropriation	
a) <u>SUBMARINE SUPPORT</u>	
i) <u>Submarine Logistics and Engineering Support</u>	-1,273
Realignment of Ship Alteration Proposals (SAP) and Ship Alteration Reports (SAR) to Budget Activity-1 (-291) and Budget Activity-2 (-982).	
4. Program Increases	8,910
A. Other Program Growth in FY 1987	(8,910)
1) <u>FLEET TECHNICAL ASSISTANCE</u>	
a) <u>CETS in Support Of MOTU</u>	252
Increase annual support required by the fleet to support newly delivered equipment.	
2) <u>SURFACE SHIP SUPPORT</u>	
a) <u>Surface Combatant Technical Support</u>	3,748
Increase for engineering services and logistics support provides BB-61 class life cycle maintenance, Steam Plant manuals for CGNs and the non-standard long lead time material program. These efforts will increase fleet readiness and eventually reduce delays and cost overruns related to executing Title K shipalts (1,200). Increase for the Ship Configuration Logistic Support Control (SCLSC) for additional surface combatants classes. Configuration efforts improve the weapons system file structure to improve logistics support which will ensure that proper repair parts, technical manuals and repair standards are made available. This makes the supply process more efficient and improves fleet readiness (2,460). Increased effort for verification of TRS's (48) and 25 additional TRS's will be maintained (40).	

Activity Group: Contractor Technical and Maintenance Support (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

Combat Craft Support/Amphibious Ships/Craft/ 3,624  
Boats Technical Support

Increase for additional ship classes in Ship Configuration Support Control (SCLSC) to ensure that proper repair parts, technical manuals and repair standard are made available. This results in a more efficient supply process and improves fleet readiness (1,490). Increase for miscellaneous fleet requirements and logistics fleet requirements and logistics tasks such as boat alterations (BOATALTS) and technical studies, cargo fuel operational sequencing systems (CFOSS), Public/Private Ship Overhaul Competition Analysis and MSO-422 Class ship extension management program (1,218). The public/private study allows for comparison of industrial fund and private yard accounting systems. The MSO extension program examines the technical requirements to extend the life of the ships since the introduction to the fleet of the MCM and MSU class ships is being delayed. Increases in development of technical data will expand data collection for hull design to include larger craft (313). Other efforts will produce a Craft Safety Plan and evaluation of new craft engines for weight, cost, and fuel consumption (118). In Combat Craft Ship Systems Engineering, an increase of 9 additional TRS's are being developed (421), and 181 TRS's are being maintained (64).

3) AIRCRAFT CARRIER SUPPORT

a) Aircraft Carrier Technical Support 197

Increase in planning, direction, and oversight of carrier fleet modernization program for efforts such as development of procedures to determine life cycle fatigue from thermal stress in SSTG castings and main engines. These types of efforts will result in less equipment/weapon system downtime, thereby increasing fleet readiness.

4) SUBMARINE SUPPORT

a) Submarine Logistics and Engineering Support 997

Increased corrosion and marine growth control by helping develop new paints, preventatives and cleaning procedures which should reduce the maintenance costs required to keep the submarine operational (89). Other technical, logistics and engineering support to improve electrical systems, increase hull support and improve maintenance procedures all of which improve readiness and are expected to decrease maintenance costs (465). Submarine Periscope requirements increase to support 3.4 workyears related to operational technical support (250) and 2.1 additional

Activity Group: Contractor Technical and Maintenance Support (cont'd)

workyears for in-service engineering (132) for periscope farmings and bearings. Both of these efforts enhance fleet readiness and are expected to reduce future periscope maintenance requirements.

Other increases are required (61).

Navigation Systems Technical Support 92

Increased support for 7 additional Electro-Static Gyro Navigation (ESGN) firmware installations (92).

5. Program Decreases -1,912

A. One Time FY 1986 Costs (-230)

1) SURFACE SHIP SUPPORT

a) Combat Craft Support/Amphibious Ships/Crafts/Boats Technical Support -230

i) LCU/LCM SLEP planning effort end with establishment of LCU/LCM Boat Rehabilitation and Modernization program in FY 1987, in Other Ship Systems Maintenance Activity Group (BA-7).

R. Other Program Decreases in FY 1987 (-1,682)

1) Civilian Ceiling Waiver -221

Savings attributed to more efficient and economical execution of workload experienced resulting from waiver of statutory end strength ceilings in FY 1985.

2) FLEET TECHNICAL ASSISTANCE

a) Direct Fleet Support -454  
Decrease of 316 events for ships deploying within 60 days.

3) AIRCRAFT CARRIER SUPPORT

a) Aircraft Carrier Technical Support -13

4) SUBMARINE SUPPORT

a) Submarine Logistics and Engineering Support -470

Decrease in logistics support for efforts such as technical data center operations and technical repair standards maintenance.

b) Navigation Systems Technical Support -524

Reduction reflects reduced support for corrective actions to navigational data for 20 fewer WSN-215 ships supported (-67); 2 fewer INS/SNAIAS ships supported (-38); reduced Ship Inertial Navigation System (SINS) technical support (-56); 310 fewer Conventional Navigational Equipments supported (-89); reduced support for Nuclear Carrier (CVNS) Navigation Facility (-111); 1 less ship supported for SSN 598/608 conversion (-158); other decreases (-5).

6. FY 1987 President's Budget Request \$52,778

Activity Group: Contractor Technical and Maintenance Support (cont'd)

III. Performance Criteria

A. FLEET TECHNICAL ASSISTANCE

1. CETS in Support of MOTU

Contractor Engineering and Technical Services (CETS) augment the in-house Mobile Technical Units (MOTU). They troubleshoot, repair, maintain and provide over-the-shoulder training in support of Fleet weapons, systems and equipments. CETS staff are on immediate alert, worldwide, 24 hours a day, 7 days a week. CETS are used when there is lack of Fleet or Direct Fleet Support repair capability or capacity. CETS requirements, by system or equipment, are determined annually by Fleet Commanders-in-chief, who regularly check all support to assure that a need actually exists. If an individual service is found to be underutilized, then it is reduced or discontinued. CETS is contracted in three ways:

Annual: Contractor personnel are located worldwide on an annual basis, to fill critical billet gaps and shortages of highly trained Navy senior enlisted personnel. Equipments supported by annual contracts include Close-In Weapon Systems (CIWS), Ships Inertial Navigation Systems (SINS), Type 18 periscopes, Navy Tactical Data Systems (NTDS), and MK 86 Gun Fire Control Systems (GFCS).

On-Call: Contractors provide technicians on an on-call basis as required. Equipments supported in this manner have a Mean Time Between Failure (MTBF) rate above the rate that would justify annual funding of a full time technician. Equipments supported by on-call contracts include evaporators, air and surface search radars, oxygen generators, Low Pressure and High Pressure air compressors and shipboard telephone systems.

Emergency: Repair contracts are let on an "as occurring" basis to repair equipment which the fleet is not able to repair. Recent (FY 1985 and FY 1986) emergency contracts have included LP and HP air dehydrators, MK 14 gyros, doppler sonar and main reduction gears.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Total Funding (\$000)	10,101	9,568	10,163
Annual	9,210	8,449	9,020
On-Call	459	520	544
Emergency	254	374	374
General Support	178	225	225

Activity Group: Contract Technical and Maintenance Support (cont'd)

III. Performance Criteria (cont'd)

2. Direct Fleet Support

Provides in-house Technical Assistance (TA) maintenance support directly to the fleet for all NAVSEA systems (except surface missile systems and radars). Support is provided on a 24 hour a day world-wide basis for shipboard systems/equipment which are out of the SCN funding period. This account also provides the fleet with scheduled systems/equipment Functional Checks (FC's) such as Combat Systems Readiness Trials/Reviews, Explosive Safety Reviews, etc. In conjunction with technical assistance and functional checks, on-the-job training is provided to ships' crews to make them technically self-sufficient. Response to CASREPS, etc., and the periodic evaluation of correction of shipboard technical problems has a direct and immediate impact upon fleet readiness. This program reduces the possibility of serious equipment casualty and attendant cost, and reduces possibility of personnel injury.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	12,748	8,541	12,186	7,727	12,169	7,411
=====						
No. Events:						
Tech. Assistance		7,293				
Functional Checks		1,248				
Safety Hazard/Sys						
Damage 1/		961	528	1,004	528	
Deployed Ships		7,485	5,096	7,820	5,096	
Deploying Ships						
(60 days)		3,740	2,103	3,345	1,787	

1/ New DFS workload priorities were implemented in FY 1986. Each priority contains a mixture of technical assistance and functional checks, thereby reflecting the fact that some functional checks are of higher priority than some technical assistance. The number of events is lower than the FY 1986 Congressional submission due to the fact that functional checks are more expensive than technical assists. Workload/cost data in the new priorities does not exist for FY 1985.

B. SURFACE SHIP SUPPORT

1. Surface Combatant Technical Support

Maintains the readiness of all surface combatant ships by providing technical oversight in the diagnosis, planning and execution of repair work. In addition, management and technical expertise are provided to ensure that documentation, support, spare parts and personnel are available to support the operational fleet.

Activity Group: Contract Technical and Maintenance Support (cont'd)

III. Performance Criteria (cont'd)

	FY 1985 \$ Units	FY 1986 \$ Units	FY 1987 \$ Units
A. Marine Gas Turbines Surf Cbt Tech Spt.	2,063	2,058	3,306
B. Steam Powered Surf. Cbt. Tech Spt.	2,456	1,235	3,749
C. Surf. Cmbt. Ship Sys. Eng.	570	363	465
D. Surf. Cmbt. Sys. Eng.	451	0	0
Total Funding	5,540	3,656	7,520
Number of Surface Combatant Hulls	221	226	226

=====

Marine Gas Turbines Surface Combatant Technical Support

Provides Engineering/Integrated Logistic Support and Overhaul Management for the depot level overhaul and repair for the Marine Gas Turbine surface combatant ships; provides salaries for 34 civilian personnel at Navy Maintenance Support Office (NAMS0) for logistic data systems support; and provides for the Ships Configuration and Logistics Support Control (SCLSC) effort.

	FY 1985 \$2,063	FY 1986 \$2,058	FY 1987 \$3,306
Total Funding			
a. SAR Preparation	477	0	1/ 0
b. Eng. Services and ILS 2/	1,205	1,846	1,675
c. Overhaul Management	82	60	34
d. Surf. Ship Surv	299	0	0
e. Ships Configuration and Logistic Support Control		152	1,597

1/ Transferred to BA2-FMP in FY 1986.

2/ Includes \$1,515 for NAMS0 starting in FY 1986 which pays 34 civilian personnel on a reimbursable basis to design and operate the Logistic Data System (LDS), a key element in the FFG-7 Class life cycle maintenance and support.

Steam Powered Surface Combatant Technical Support

Increases the operational availability, reliability, and maintainability of the Steam Powered Surface Combatant ship HM&E and Combat systems; and provides for Ships Configuration and Logistics Support Control which is the Navy configuration management system for competent level configuration accounting for ships.



Activity Group: Contract Technical and Maintenance Support (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Total Funding	<u>\$2,456</u>	<u>\$1,235</u>	<u>\$3,749</u>
a. SAR Preparation	579	0 <u>1/</u>	0
b. Eng. Services and ILS	814	845	2,376
c. Overhaul Management	165	100	119
d. Surf. Ship Surv	898	0	0
e. Ships Configuration and Log. Spt. Ctl.	0	290	1,254

1/ Transferred to BA2-FMP in FY 1986

Surface Combatant Ship System Engineering

Prepares Technical Repair Standards (TRS) manuals to provide in a single document all procedures, technical specifications, drawings, and acceptance criteria necessary to restore surface combatant hull, maintenance, and electrical equipment to original performance specifications.

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	\$	Units	\$	Units	\$	Units
TRS's						
- Maintenance	303	225	336	225	390	250
- Verification			27	5	75	5
Total TRS	<u>303</u>		<u>363</u>		<u>465</u>	
SAPs Prepared	267	19	*		*	
Total Surf. Ship Sys Eng.	570		363		465	

Surface Combatant System Engineering

Provided for scheduling and development of Ship Alteration Proposals (SAPs) required to support and upgrade the combat system of surface combatants. Also provided review and technical approval of all planning yard development of Ship Alteration Records (SARs) and Basic Alteration Class Drawings (BACDs) for major or first time installations.

SAPs Developed	\$256	*	*
SARs Reviewed	125	*	*
BACDs Reviewed	70	*	*
TOTAL	<u>\$451</u>		

\* Transferred to FMP BA 2 account in FY 86.

Activity Group: Contract Technical and Maintenance Support (cont'd)

III. Performance Criteria (cont'd)

2. Combat Support Ships/Amphibious Ships/Craft/Boats Technical Support

This program provides for developing and managing programs for the overhaul, repair, activation, maintenance, and logistic support of combat support ships, amphibious ships, craft, and boats. These constitute about half of all Navy surface ships. Among the ships covered by the funds are Mobile Logistic Support Force vessels which act as the life-support system of deployed fleet combatants and amphibious ships.

The program objective is to assure high material readiness of operating forces. Recent efforts to increase the operational tempo of the fleets and to incorporate sophisticated equipment and self-defense weapons (such as Close-In Weapon Systems) aboard Amphibious and Combat Support ships have placed additional demands on this program.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
<u>Total Funding</u>	\$4,384		\$3,246		\$6,741	
=====						
A. CSS/ASC Boat						
Tech. Spt.	2,337		1,785		4,531	
B. Combat Crft.						
Spt.	805		1,037		1,284	
C. Cmbt Crft.						
Ship Sys. Eng.	422		424		926	
D. Combat Crft.						
Combat Sys. Eng.	820		0		0	
=====						

<u>CSS/ASC Boat</u>						
<u>Tech Spt</u>	<u>2,337</u>		<u>1,785</u>		<u>4,531</u>	
1. SARs Prepared	720	72	*		*	
2. Flt Req./#Tasks	572	183	603	185	1,120	347
3. Eng. Mgt/Log						
Plng Prog.	829		636		1,354	
4. Private Sector						
O/H Mgt./FMP						
Support	67		100		100	
5. Other Req.						
(Tasks)	149	50	51	17	75	20
6. Ships Config. and						
Log. Spt. Ctl.			395		1,882	

\* Transferred to BA2, FMP in FY 86.

Activity Group: Contract Technical and Maintenance Support (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
<u>Cmbt Craft Support</u>	<u>\$805</u>	<u>1,037</u>	<u>1,284</u>
1. Develop Tech Data	258	252	575
2. Survivability/Reliability Analysis	180	300	404
3. Engineering Imprv.	237	166	175
4. Productivity Imprv	130	89	130
5. LCM/LCU SLEP Plng.	0	230	0

Combat Craft Support Ship Systems Engineering

Prepares Technical Repair Standards (TRS) manuals to provide in a single document all overhaul procedures, technical specifications, drawings, and acceptance criteria necessary to restore combat craft and support hull, maintenance, and engineering equipment to satisfactory performance specifications.

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	\$	Units	\$	Units	\$	Units
Combat Craft SSE -TOTAL	<u>422</u>		<u>424</u>		<u>926</u>	
TRS's						
- HQ Support	--	--	7	--	--	--
- Maintenance	5	40	100	19	196	200
- Verification	--	--	93	7	75	5
- Certification	--	--	--	--	--	--
- Development	<u>160</u>	5	<u>224</u>	6	<u>655</u>	15
Total TRS	165		424		926	
SAPs Prepared	257	18	*		*	

\* Transferred to BA 2 FMP in FY 86.

Combatant Craft Combat Systems Engineering

This program provides for scheduling and development of all combat system ship alteration proposals required to support and upgrade the combat systems of the Auxiliary and Amphibious Ships.

SAPs Developed	\$604	*	*
SARs Reviewed	111	*	*
BACDs Reviewed	105	*	*
Total	<u>\$820</u>		

\*Transferred to BA 2 FMP in FY 86.

Activity Group: Contract Technical and Maintenance Support (cont'd)

III. Performance Criteria (cont'd)

C. AIRCRAFT CARRIER TECHNICAL SUPPORT

1. Aircraft Carrier Technical Support

Responsible for identifying and effecting improvements in areas such as shipboard firefighting systems, health hazards, habitability, corrosion control and weapon aircraft elevators. Improvements are achieved through component/system redesign, revisions to operating techniques and procedures, control disciplines and improvements in logistics, training and documentation.

Three programs included are: 1) CV Technical Support which provides engineering technical support for investigating and applying equipment/systems to aircraft carriers and new equipment requirements for 8-10 overhauls a year; analyzes maintenance and performance data to discover ship problems, solve ship configuration inadequacies and investigates problems encountered outside of industrial availabilities, generally at the request of the Fleet, (note that units below include reports, services and overhaul management such as ShipAlt drawings, antenna system, SARs reviews, technical data collection, ShipAlt reviews, on-site inspections, ship configuration status reports and work package assessments); 2) CV Ship Systems Engineering which funds engineering development of Technical Repair Standards (TRS); and 3) CV Combat Systems Engineering which provides for the scheduling and development of all requisite Combat Systems upon aircraft carriers that require support and upgrade.

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding/ # of Carriers	\$1,155	16	\$962	16	\$1,179	16
=====						
A. CV Tech Spt	906		787		1,010	
B. CV Ship Sys. Eng.	132		175		169	
C. CV Combat Sys. Eng.	117		0		0	
Efforts Funded:						
A. CV Tech Support						
1. Logistic Mgmt.	151		98		285	
2. Fleet Reqmts.	305		306		360	
3. Overhaul Mgmt.	450		383		365	
# Availabilities Supported		6		9		10
B. CV Ship System Eng.						
1. TRS's						
- HQ Support			8	--	15	--
- Maintenance	95	40	120	25	115	25
- Verification			47	4	39	2
- Development	10					
Total TRS	105		175		169	
2. SAP's Prepared	27	2	*		*	

Activity Group: Contract Technical and Maintenance Support (cont'd)

III. Performance Criteria (cont'd)

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
C. CV Combat Systems Eng.						
1. SAPs Developed	78	9	*		*	
2. BACDs Reviewed	39	21	*		*	

\* Transferred to FMP BA2 account in FY-86.

D. SUBMARINE SUPPORT

1. Submarine Logistic and Engineering Support

Submarine Technical Support

Provides engineering services and logistic support for all operating nuclear powered submarines in conjunction with NAVSEA efforts concerning maintenance and repair action from both private contractor and naval activities. The services include technical reviews, design investigations, and surveys and involves the assignment of engineering personnel from lead design and planning activities to investigate and resolve fleet HM&E and combat weapons system technical interface and integration problems. These services are provided in response to fleet casualty reports and technical requests. The program also supports NAVSEA's ability to respond and provide solutions to both hardware and software material problems which prevent submarines from maintaining their deployed/operational status. Additionally, this program develops new procedures, engineering standards and specifications to ensure maximum fleet readiness conditions. Engineering and logistics personnel are used to assist Forces Afloat personnel to solve complex technical problems.

Submarine Ship System Engineering

This effort upgrades and maintains all Technical Repair Standards (TRS) as well as certifying the usability of existing TRSs, rewriting existing and developing new TRSs to provide consolidated overhaul specifications, and verifying all new and rewritten TRSs. TRSs provide in a single document all procedures, technical specifications, drawings, and acceptance criteria necessary to restore submarine HM&E equipment to original performance specifications. The upgrade of TRSs will improve the quality of submarine overhauls.

Submarine Periscope/Antenna

This program provides technical support for operation and problem resolution for various types of periscope systems such as Type 18, Type 15, Type 8 and Type 2. It supports the development of test procedures, standards, subsafe drawings, handbooks, and publications for fleet maintenance of these systems.

Submarine Combat System Engineering

Provides technical coordination of configuration management and control of the weapons, communication and ESM systems for operational submarines. This program encompasses about 128 submarines in the SSN 688 and SSBN 726 classes.

Activity Group: Contract Technical and Maintenance Support (cont'd)

III. Performance Criteria (cont'd)

	FY 1985	FY 1986	FY 1987
	\$ Units	\$ Units	\$ Units
Total Program Funding	16,628	11,919	11,515
=====			
a. <u>Submarine Technical Support</u>			
Total Sub. Technical Spt.	14,378	9,961	10,356
=====			
Number of Submarines	129	132	133
=====			
Submarine Safety	435	247	260
Atmosphere Support	265	200	210
Technical & Engineering Support	5,730	5,528	6,165
Hull Support	4,790	800	850
Corrosion Supt.	185	60	250
Electrical Supt.	1,000	1,111	1,146
Mechanical Spt	465	534	555
Electronics Spt.	165	210	220
Logistics Spt.	1,343	1,271	700
b. <u>Submarine Ship System Engineering</u>			
Ship Alteration Proposals	764	33 508	35 *

\* Transferred to FMP, BA 1/2 in FY-87.

Activity Group: Contractor Technical and Maintenance Support

III. Performance Criteria

	\$ <u>FY 1985</u>		\$ <u>FY 1986</u>		\$ <u>FY 1987</u>	
	Units		Units		Units	
c. <u>Submarine Periscope/Antenna</u>						
Total Funding						
Sub. Per/Antenna	775		749		1,159	
	=====					
Total Workyears	11.4		10.5		16.2	
Tech. Spt for Oper-						
ational Periscopes	410	6.0	389	5.6	646	9.0
Config Mgmt Spt	144	2.2	143	2.0	155	2.1
Subsafe Drawing						
Requirements	30	.4	35	.5	32	.4
Development of Test						
Procedure, Manuals,						
Publications	60	.9	60	.8	65	.9
In-Service Eng	85	1.2	77	1.0	211	3.1
Standards	46	.7	45	.6	50	.7

d. Submarine Combat System Engineering (CSE)

	\$ <u>FY 1985</u> WYs		\$ <u>FY 1986</u> WYs		\$ <u>FY 1987*</u> WYs	
Total Funding	711		701			
Sub. CSE						
Total Workyears	12.4		11.9			
SARs Reviewed	38		38		*	
BACDs Reviewed	68		66		*	
Submarine Combat System Engineering	605		597		*	

\* Transfers in FY 1987 to FMP BA 1 & 2.

2. NAVIGATION SYSTEMS TECHNICAL SUPPORT

This program maintains the material readiness of shipboard (SSN, CV(N), BB, CG(N), DD, DDG and FFG) Navigation Systems. It provides timely corrective actions to achieve the required high reliability and availability of accurate navigational data for vessel navigation; torpedo and missile targeting; aircraft alignment; AEGIS, SM-2 (ER) and TOMAHAWK weapon system stabilization and alignment. Specifically, these functions are financed by this program: logistic management of SINS, DMINS, ESGN and WSN-2/5; determination of operational reliability/performance and In-Service Engineering Agent functions related to inertial navigation systems and advanced gyrocompasses (SINS, DMINS, ESGN, AN/WSN-2/5, conventional navigation systems (gyrocompasses, magnetic compasses, EM logs, DRAI, DRT, tactical plotters, sighting equipment, plotting equipment, time measuring equipment, meteorological equipment)), and aircraft inertial alignment systems, maintenance of technical documentation for navigation systems, and performance certification of the ship's navigation and aircraft inertial alignment systems on CV, CVs and of all the inertial navigation systems on SSNs, CGs, and DDGs.

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Activity Group: Contractor Technical and Maintenance Support

III. Performance Criteria

	FY 1985		FY 1986		FY 1987	
	\$	Units	\$	Units	\$	Units
Total Funding	3,868		3,799		3,491	
SPCC Logistics Spt. (ESGN/DMINS/SINS) (# of Instl.)	700	100	665	100	665	100
SPCC Logistics Spt. (AN/WSN-2/5) (# of Instl.)	250	90	235	90	235	90
DMINS Tech. Spt.	50		50		50	
DMINS, ESGN, AN/WSN-2/5 Reliability (# of Ships Suprted)	440	170	440	170	390	150
INS/SNAIAS Cert. (# of Ships Suprted)	828	50	450	28	429	26
AN/WSN-2/5 Tech. Spt. (# of Manuals Maintenance)	400	3	415	3	400	3
SINS Tech. Spt.	188		150		100	
Conventional Nav Sys Tech Spt. (# of Equip.)	403	1,700	400	1,700	327	1,390
ESGN Tech Spt. (# of Instl.)	150	20	200	25	250	29
ESGN Firmware Spt. (# of Instl.)	150	10	200	12	300	19
CVNS Navigation Facility		-	300		200	
NARF TPS Maint. (# of TPS's Supported)	105	45	94	45	95	45
SSN 598/608 Conversion (# of Ships Supported)	204	2	200	2	50	1

Acronyms

SPCC -	Ships Parts Control Center
DMINS -	Dual Miniature Inertial Navigation System
ESGN -	Electro Static Gyro Navigation
INS/SNAIAS -	Inertial Navigation System/Ships Navigation Aircraft and Inertial Alignment System
SINS -	Ships Inertial Navigation System
CVNS -	Nuclear Carriers
NARF TPS -	Naval Air Rework Facility Test Program Set
DRAI -	Dead Reckoning Analyzer Indicator
DRT -	Dead Reckoning Tracer

IV. Personnel Summary. (End Strength)

N/A

70281



Department of the Navy  
Operation and Maintenance, Navy  
Exhibit OP-05

Activity Group: ASW Support  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Sea Systems Command

I. Description of Operations Financed

The purpose of the program is to provide life cycle technical support, periodic testing and correctional improvements to ASW sensors and weapon systems in order to maintain ASW Surface and Submarine forces at a high level of effectiveness and readiness.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appro- priation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
ASW Submarine Tech Spt						
ASW Sub Tech Spt	80,669	81,684	79,891	77,422	80,633	3,211
ASW Surface Ship Tech Spt						
ASW Surf Ship Tech Spt	43,510	46,120	45,461	43,411	46,886	3,475
ASW Avionics Tech Spt						
ASW Avionics Tech Spt	<u>1,915</u>	<u>1,445</u>	<u>1,438</u>	<u>1,338</u>	<u>4,286</u>	<u>2,948</u>
TOTAL, ASW SYS SUPPORT	126,094	129,249	126,790	122,171	131,805	9,634

Activity Group: ASW Support (cont'd)

B. <u>Reconciliation of Increases and Decreases</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$122,171
2. Pricing Adjustments	4,246
A. Stock Fund	(4)
1) Non-Fuel	4
B. Industrial Fund	(1,977)
C. Other Pricing	(2,265)
3. Functional Transfers	-105
A. Transfers-Out	(-105)
1) Intra-Appropriation	
a) <u>SURFACE ASW TECH SUPPORT</u>	
PM-4 Disestablishment	-105
Transfer to CNO (09BF) of 2 reimbursable billets.	
4. Program Increases	12,278
A. Other Program Growth in FY 1987	(12,278)
1) ASW SUBMARINE TECHNICAL SUPPORT	3,237
a) <u>AN/BQQ-5</u>	
An increase in the number of software modifications and upgrades for the SSN sonar systems (901).	
b) <u>MK 48 Torpedo</u>	
Supports the hybrid simulator for ADCAP testing and ADCAP software and machinery (608).	
c) <u>SUBACS</u>	
For configuration management analysis to assure compatibility and consistent operational guidelines with current fire control and sonar systems (1,728).	
2) ASW SURFACE TECHNICAL SUPPORT	6,124
a) <u>Acoustic Trials</u>	
Increase will fund an additional 35 acoustic trials (1,171).	
b) <u>Other Surface Support</u>	
Sonar System - Installation of engineering changes on SQS 26 and SQS 53A (385).	
SQQ 89, SQS 53B, SQR 19 - Increase provides technical support for the installation and certification of thirteen AN/SQQ-89, thirteen AN/SQR-19 and seven AN/SQS-53B systems on active CG-47, DD 963, DD 993, DDG 51 and FFG 7 class ships during FY 1987 (4,063).	

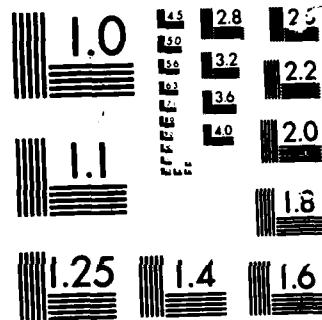
DEPARTMENT OF THE NAVY JUSTIFICATION OF ESTIMATES FOR  
FISCAL YEAR 1987 SU. (U) OFFICE OF THE COMPTROLLER  
(NAVY) WASHINGTON DC FEB 86

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Activity Group: ASW Support (cont'd)

B. <u>Reconciliation of Increases and Decreases (cont'd)</u>	<u>Amount</u>
c) Targets Supports the provision of Over The Side (OTS) system capabilities and other improvements to the MK 28 target which will allow the target to be used with both the new MK 50 and MK 48 ADCAP torpedoes (505).	
3) AVIONICS TECHNICAL SUPPORT 2,917 CV ASW Module -	
Realignment from Aviation ASW Maintenance Support primarily for efforts relating to technical assistance, installations, Engineering Support, drawings, manuals, publications, other ILS support and ASW tape recorders (1,683). Increase also supports the installation of the Fast Time Analysis System and the increased display (347). Tape Labs - FY 1987 new start to provide tape lab support to DOD for high testing and qualifying new production high instrumentation tapes for all of DOD (887).	
5. Program Decreases -6,785	
A. Other Program Decreases in FY 1987 (-6,785)	
1) Civilian Ceiling Waiver -607	
2) ASW SUBMARINE TECHNICAL SUPPORT -2,311	
a) CART Will decrease number of tests performed in FY 1987 from 32 to 21 (-1,022).	
b) MK-117/CCS MK-1 Will provide less product improvement for correction of deficiencies and for implementing improvements to ASW fire control systems (-1,289).	
3) ASW SURFACE SHIP TECHNICAL SUPPORT -3,867	
CAPTOR - Reduction in technical analysis work to resolve technical problems and develop improvements. CAPTOR MINES.	
6. FY 1987 President's Budget Request \$131,805	

Activity Group: ASW Support (cont'd)

III. Performance Criteria

Unless included below units would be reflected as various, comprised of items and workyears and/or items of varying mix which may not lend themselves to average pricing from one year to the next due to changes in the mix of the workload. Additional backup data will be provided upon request.

1. ASW SUBMARINE TECHNICAL SUPPORT

This program provides the basic source of technical support for various complex sonar and ordnance systems on submarines. Principal types of effort included are: statistical analysis, investigations, testing, and engineering design of corrective fixes of items in the operational inventory for the purpose of extending the useful life within current performance levels; Installation and Checkout (I&C); Integrated Logistics Support (ILS) Management; Configuration; Training Certification Program (TCP); Follow on Test and Evaluation (FOT&E) programs for the Torpedo MK-48; various other maintenance engineering tasks for operational fleet systems; and the operation of test sites, development of test procedures and performance of standard tests within the shipyard and at sea after major events such as overhauls and major modifications or prior to ship deployment. The program is comprised of four elements: (1) AN/BQQ-5 Technical Support; (2) MK-48 Torpedo Technical Support; (3) Other Submarine Technical Support; and (4) ASW Test Program.

	FY 1985	FY 1986	FY 1987
	\$ Units	\$ Units	\$ Units
Total Funding	80,669	77,422	80,633
=====			
1. AN/BQQ-5	11,312	16,879	18,455
2. MK-48 Torp	23,133	20,965	22,412
3. Other Sub Spt	24,697	23,885	24,704
4. ASW Test Prog			
ASW Tests	11,373	9,287	8,398
COT (# of tests)	16	14	12
WSAT (# of trials)	38	40	42
CART (# of tests)	23	32	21
SHAREM (exercises)	4	*	*
PACER (workyears)	6	*	*
FORACS	7,375	6,406	6,664
(# of Test Ops)	93	102	104
ACOUSTIC TRIALS	2,779	**	**
(# of trials)	91		

\* NAVSEA program responsibility ends in FY 1985.

\*\* Moves to ASW Surface Technical Support beginning in FY 1986.

Activity Group: ASW Support (cont'd)

III. Performance Criteria (cont'd)

COT - Consolidated Operability Test  
WSAT - Weapon Systems Accuracy Trials  
SHAREM - Ship ASW Readiness Effectiveness Measuring  
PACER - Post Operational Critique and Exercise Review  
FORACS - Fleet Operational Readiness Accuracy Check Site  
CART - Consolidated ASW Readiness Test

2. ASW SURFACE SHIP TECHNICAL SUPPORT

This program provides the basic source of technical support for various complex sonar and ordnance systems on surface ships. Principal types of effort included are: statistical analysis, investigations, testing, and engineering design of corrective fixes of items in the operational inventory for the purpose of extending their useful life within current performance levels; Installation and Checkout (I&C); Integrated Logistics Support (ILS) Management; Configuration Management (CM); Operation of House Models; Data review and update; Fleet introduction analysis and planning for CAPTOR; and various other maintenance engineering tasks for operational fleet systems.

The program is comprised of four elements: (1) CAPTOR Technical Support; (2) MK-46 Torpedo Technical Support; (3) Other Surface Technical Support; and, (4) Acoustic Trials.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	<u>\$      Units</u>	<u>\$      Units</u>	<u>\$      Units</u>
Total Funding	43,510	43,411	46,886
=====			
1. CAPTOR Spt	8,832	12,540	9,175
2. MK-46 Torp	5,101	4,932	4,728
3. Oth Surface Spt	29,577	23,084	28,842
4. Acoustic Trials	*	2,855	4,141
(# of trls)		90	125

\* Moves from ASW Submarine Technical Support beginning in FY 1986.

Activity Group: ASW Support (cont'd)

III. Performance Criteria (cont'd)

3. ASW AVIONICS TECHNICAL SUPPORT

This program provides for reliability improvement of the CV-ASW Modules and life-cycle engineering and logistic support for the Integrated Carrier Acoustic Processor System (ICAPS). Principal types of effort included are: developing system configuration drawings; identifying training requirements; initiating installation planning, integration and testing; safety assessments; developing engineering change orders; and developing documentation.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Total Funding	1,915	1,338	4,286
=====			

IV. Personnel Summary (End Strength) N/A



DEPARTMENT OF THE NAVY  
OPERATION & MAINTENANCE, NAVY  
Exhibit OP-05

Program Package: Maintenance of Real Property  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Sea Systems Command

I. Description of Operations Financed.

The Real Property Maintenance Activities Program supports repair/maintenance actions and minor construction of NAVSEA military personnel support facilities at NAVSEA field activities. Funding in this activity group reflects Navy efforts to reduce the backlog of maintenance and repair at Naval facilities in accordance with Congressional direction to contain the backlog of repair projects by the end of FY 1988. The subactivities included under the Real Property Maintenance are described below:

A. Maintenance of Real Property - finances routinely scheduled maintenance, routine repairs, emergency repairs, and major repairs at Naval Shipyards, Ordnance Stations, Inactive Ship Maintenance Facilities and Supervisors of Shipbuilding, and other NAVSEA field activities. Major Repair funding finances more substantial maintenance projects over \$75 thousand which are required to bring existing facilities into adequate condition to permit field activities to fulfill their assigned mission.

B. Minor Construction - finances projects under \$25 thousand for alterations to facilities, extensions of utility systems, additions to existing facilities, and installation of windows, doors, air conditioners, roofs, etc. Also includes selected minor construction projects over \$25 thousand which require NAVSEA approval.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appro- priation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Maint of Real Property	11,331	8,007	9,116	12,325	17,040	4,715
Minor Construction	<u>2,033</u>	<u>4,290</u>	<u>4,286</u>	<u>3,138</u>	<u>3,599</u>	<u>461</u>
TOTAL, MAINT OF REAL PROP	13,364	12,297	13,402	15,463	20,639	5,176

Activity Group: Maintenance of Real Property (cont'd)

B. <u>Reconciliation of Increases and Decreases</u>	Amount
1. FY 1986 Current Estimate	\$15,463
2. Pricing Adjustments	687
A. Industrial Fund Rates	(616)
B. Other Pricing	(71)
3. Functional Transfers	351
A. Transfers-In	(351)
1) Inter-Appropriation	
a) MAINTENANCE OF REAL PROPERTY	351
Funds transferred from the RDT&E,N appropriation to support BOS-MRP at the Naval Ordnance Missile Test Station, White Sands, NM.	
4. Program Increases	6,860
A. Other Program Growth in FY 1987	(6,860)
1) MAINTENANCE OF REAL PROPERTY	6,338
Increase funds various projects over \$75K previously funded by the Naval Material Command at Norfolk, Mare Island, Portsmouth, Philadelphia and Puget Sound Naval Shipyards (2850) and at the Yorktown, Earle, Indian Head and Charleston Weapon Stations (3488).	
2) MINOR CONSTRUCTION	522
Increase due to additional Minor Construction projects at SUPSHIP, San Francisco to support drydock #4 (318). Increase also reflects increased environmental, health and safety, welfare/recreation, non-capital and other capital minor construction projects at the ordnance stations (204).	
5. Program Decreases	-2,722
A. Other Program Decreases in FY 1987	(-2,722)
1) Civilian Ceiling Waiver	-50
Savings attributable to more efficient and economical execution of workload experienced resulting from waiver of statutory end strength ceilings in FY 1985.	
2) MAINTENANCE OF REAL PROPERTY	-2,398
Decrease results from reduced waterfront facilities, community buildings, storage buildings and bachelor housing facilities	

Activity Group: Maintenance of Real Property (Cont'd)

as well as grounds maintenance and repair efforts at the shipyards (-511) and ordnance stations (-1,887).

3) MINOR CONSTRUCTION

-274

Decrease due to reduced health and safety mission and other capital minor construction projects at the shipyards.

4. FY 1987 President's Budget Reques

\$20,639

III. Performance Criteria and Evaluation

FY 1985

FY 1986

FY 1987

Maintenance of Real Property

Backlog, Maint/Repair (\$000)

49,883

46,139

46,334

Total Buildings (KSF)

13,698

14,809

14,887

IV. Personnel Summary (END STRENGTH) N/A

DEPARTMENT OF THE NAVY  
OPERATION & MAINTENANCE, NAVY  
Exhibit OP-05

Program Package: Other Base Operations  
Budget Activity: 7 Central Supply and Maintenance  
Claimant: Naval Sea Systems Command

I. Description of Operations Financed.

The Other Base Operations Program provides support services and material support to NAVSEA field activities, enabling assigned forces and tenants to perform their mission. Funds are utilized for military and civilian support functions which are not directly related to the industrial effort. The subactivities included in Other Base Operations are described below:

A. Utility Operations - includes costs of purchased utilities and also utility systems generation/distribution costs where applicable.

B. Base Communications - provides support for basic telephone equipment, installation, maintenance, removal, and service charges at NAVSEA headquarters and field activities. Provides for the costs of administrative communication systems, base telecommunication networks, and industrial security networks. Excludes industrial funded systems or those operational telecommunication activities directly supporting fleet operating forces.

C. Personnel Operations

1. Bachelor Housing - provides support for the operation of barracks, personnel housing, BOQs, BEQs, and the purchase and maintenance of personnel support equipment related to the housing of personnel.

2. Other Personnel Support - provides for food service facilities, sales activities, laundry and dry cleaning, initial procurement, repair, and replacement of furniture and furnishings, operation of chapels, and family service centers.

3. Morale, Welfare and Recreation - provides authorized appropriated fund support for shore based recreational activities, special services, personnel support equipment, libraries, child care centers, clubs and messes, military and civilian general recreation facilities.

4. Medical/Dental Operations - provides funding for the Naval Regional Medical/Dental Clinics at NAVWPNSUPCEN Crane, IN and NAVORDSTA, Louisville, KY.

5. Human Goals - provides support for Navy Drug and Alcohol programs where personnel with alcohol or substance abuse problems are identified and counseled. Also provides funding for educational services for abuse prevention and operation of drug and alcohol rehabilitation facilities.

Activity Group: Other Base Operations (cont'd)

D. Base Operations - Mission

1. Retail Supply Operations - provides support for servicewide supply involving the receipt, inspection, packing of inert Navy material, the provision of technical information services, and the maintenance of stock records. Processes various Naval and DOD requisitions from Inventory Control Points (ICPs) and transaction reports to ICPs.

2. Other Base Services - provides support for security and police protection, base transportation and associated vehicle operation and routine maintenance, port services, service craft operation/maintenance, tool issues, and degaussing operations.

E. Base Operations - Ownership

1. Engineering Support - provides support for public works departments, firefighting services, refuse collection and disposal, custodial services, and entomological services. Also funds planning, design and engineering support for facility projects.

2. Administration - provides funding for off-station activities and on-base tenants (as common support service) for the following functions: command and administration, civilian and military personnel services, legal assistance, accounting/auditing services, mail, travel administration, and other related common administrative support services.

3. Automated Data Processing - provides the management support costs for in-house computer programming as well as equipment rental and other contractual ADP purchases in support of tenants at NAVORDSTA, Indian Head.

4. Hazardous Waste - provides support for the personnel, supplies, and training associated with the identification and disposal of hazardous waste material at NAVSEA facilities. Funding supports development of waste management plans, operations, maintenance, and repair of storage facilities, and treatment and disposal of toxic substances.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
A. Utility Operations	10,410	9,632	9,332	8,978	10,201	1,223
B. Base Communications	4,966	5,284	5,207	4,416	3,752	-664
C. Personnel Operations	9,476	9,859	9,513	8,881	8,963	82

Activity Group: Other Base Operations (cont'd)

A. Sub-Activity Breakout (Cont'd)

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appro- priation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
D. Base Ops-Mission	19,390	17,829	17,515	22,366	18,482	-3,884
E. Base Ops-Ownership	14,600	13,532	13,131	13,052	19,416	6,364
TOTAL, OTHER BASE OPS	58,842	56,136	54,698	57,693	60,814	3,121

Activity Group: Other Base Operations (cont'd)

B. <u>Reconciliation of Increases and Decreases</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$57,693
2. Pricing Adjustments	1,476
A. Industrial Fund Rates	(1,153)
B. Other Pricing	(323)
3. Functional Transfers	704
A. Transfers-In	(749)
1) Inter-Appropriation	
Increase reflects transfer of funds from the RDT&E,N appropriation to support BOS costs at the Naval Ordnance Missile Test Station, White Sands, NM for the following efforts:	
a) UTILITIES	324
b) OTHER ENGINEERING SUPPORT	103
c) BACHELOR HOUSING	16
d) ADP	69
e) OTHER BASE SERVICES	237
B. Transfers-Out	(-45)
1) Intra-Appropriation	
a) OTHER ENGINEERING SUPPORT	
Transfer of SLUC reimbursable costs to budget activity nine, CNO.	
	-45
4. Program Increases	9,239
A. Other Program Growth in FY 1987	(9,239)
1) Utilities	684
Increment provides funds for local/regional rates which exceed the authorized rates. Steam and Hot Water (26) Electricity (365) Fuels (105)	
Water and Sewage Plant Systems (105)	
Air conditioning, Refrigeration and	
Other Utility Systems (83)	
2) OTHER ENGINEERING SUPPORT	2,067
Increase is attributed to "quality of life" improvements in the areas of custodial services under contract at St. Juliens Creek, Norfolk, Puget Sound, Bachelor Enlisted Quarters (BEQ), Mare Island Child Care Center and the SUPSHIP Jacksonville Administration building, refuse and garbage disposal for all of the above, exterior cleanup, emergency service work for other than real property, other maintenance and	

Activity Group: Other Base Operations (cont'd)

B. Reconciliation of Increases and Decreases (Cont'd)

Amount

- service and preventive maintenance installation for the Philadelphia, Norfolk, Mare Island and Puget Sound Naval Shipyards (346). Increment will support a net increase for new leases, particularly for SUPSHIP, Long Beach (206). Increase also supports directed requirement to mobilize the fire station at the South Annex, Charleston Weapon Station (274), as well as increased requirements for exterior clean up, entomology containment/control and refuse collection/disposal in support of the AOE homeporting effort at the Earle WPNSTA beginning FY 1987 (105). Increase required to bring fire protection support level/standards up to that required for fire safety regulatory provisions at Indian Head, Keyport, Yorktown and Seal Beach WPNSTAs (155). Increment required to support administration/engineering efforts at the shipyards (317) and ordnance stations (664) based on 10% of increased funding for projects over \$75K in Maintenance of Real Property.
- 3) ADMINISTRATION 72  
Increase will fund industrial relations such as photo lab services, legal services and accounting services (27) as well as increased civilian personnel services at the shipyards (45).
- 4) BACHELOR HOUSING 285  
Increase due to the additional support required for BEQ services resulting from the new BEQ established at the Puget Sound Naval Shipyard in FY 1986.
- 5) MORALE, WELFARE & RECREATION 65  
Increase supports the new child care center at Mare Island Naval Shipyard (44) as well as increased requirements for the operation of clubs and messes and libraries at the ordnance stations (21).
- 6) OTHER BASE SERVICES 2,061  
Increase provides support for the operation and maintenance of 3 additional owned motor vehicles and 4 additional leased motor vehicles (36). Increment also reflects an increase in guard services (409) and police protection (783) in order to upgrade security at the



Activity Group: Other Base Operations (cont'd)

B. <u>Reconciliation of Increases and Decreases (Cont'd)</u>	<u>Amount</u>
<p>shipyards. Tool issues (378) and convenience berthing (455) increase due to increased Selected Restricted Availabilities (SRAs) and Phased Maintenance Availabilities (PMAs) at the naval shipyards. This increase is also driven by the new requirement for these services at drydock # 4 at Hunters' Point and the requirement to support the homeporting of the USS NIMITZ and its support group at the Puget Sound Naval Shipyard beginning in FY 1987.</p>	
<p>7) HAZARDOUS WASTE Increment provides funds to clean up past hazardous waste sites as identified by the Naval Assessment and Control of Installation Pollutant Surveys and confirmed by subsequent investigations of industrial sites (908). Increase also supports PCR cleanup and disposal (707) and increased efforts in site investigation and restoration at the naval shipyards (226).</p>	1,841
<p>8) PHYSICAL SECURITY Increase supports 35 civilian security personnel at the ordnance stations (937). Increment also supports the Shipboard Nuclear Weapons Security (SNWS) Program which will provide development and installation of corrected alarm doors and drawing packages and In-Service Engineering Agent (ISEA) support of the SNWS portable communications system (1,208).</p>	2,145
<p>9) HUMAN GOALS</p>	19
<p>5. Program Decreases</p>	-8,298
<p>A. One Time FY 1986 Costs</p>	(-5,500)
<p>1) OTHER BASE SERVICES Decrease results from severance pay required for the expected reductions in force (RIFs) at Long Beach and Pearl Harbor Naval Shipyards in FY 1986.</p>	-5,500
<p>B. Other Program Decreases in FY 1987</p>	(-2,798)
<p>1) Civilian Ceiling Waiver Savings attributable to more efficient and economical execution of workload experienced resulting from waiver of statutory end strength ceilings in FY 1985.</p>	-210

Activity Group: Other Base Operations (cont'd)

B. <u>Reconciliation of Increases and Decreases (Cont'd)</u>	<u>Amount</u>
2) ADMINISTRATION -109 Decrease reflects reduced command and administration efforts at the ordnance stations.	
3) RETAIL SUPPLY OPERATIONS -452 Decrease due to a reduction in the service wide supply effort at the ordnance stations.	
4) OTHER BASE SERVICES -524 Decrease reflects reduced security and port services efforts at the ordnance stations.	
5) MEDICAL/DENTAL -63 Decrease due to a reduced purchase of supplies at the Medical/Dental Clinic at Crane.	
6) BASE COMMUNICATIONS -816 Decrease reflects expected management improvement initiatives at headquarters (-632) and the shipyards (-166) and ordnance stations (-18).	
7) OTHER PERSONNEL SUPPORT -470 Decrease results from a reduction in costs for food services, laundry/dry cleaning and the operation of chapels at the shipyards (-49) and the ordnance stations (-421).	
8) BACHELOR HOUSING -27	
9) ADP -10	
10) HUMAN GOALS -1	
11) PHYSICAL SECURITY -116 Decrease reflects reduction in shipyard physical security efforts such as the installation of vehicle barriers and the training of security guard dog handlers.	
6. FY 1987 President's Budget Request	\$60,814

III. <u>Performance Criteria and Evaluation</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
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BASE OPERATIONS

OPERATIONS OF UTILITIES

TOTAL ENERGY CONSUMED (MBTU'S)	839,190	972,269	920,788
TOTAL NON-ENERGY CONSUMED (000 GALS)	2,056,092	2,011,951	1,986,940

BASE COMMUNICATIONS

NUMBER OF INSTRUMENTS	11,768	11,768	11,768
NUMBER OF MAINLINES	6,175	6,175	6,175
DAILY AVERAGE MESSAGE TRAFFIC	31,955	31,955	31,955

PERSONNEL OPERATIONS

BACHELOR HOUSING (\$000)	737	824	1,111
NO. OFFICER QUARTERS	229	229	229
NO. ENLISTED QUARTERS	2,530	3,418	3,418

OTHER PERSONNEL SUPPORT (\$000)	4,851	4,614	4,249
POPULATION SERVED, TOTAL	116,791	116,794	116,794
(MILITARY, E/S)	68,422	68,425	68,425
(CIVILIAN, E/S)	48,369	48,369	48,369

MORALE, WELFARE & REC (\$000)	3,888	3,443	3,603
POPULATION SERVED, TOTAL	185,110	185,120	185,120
(MILITARY, E/S)	96,338	96,340	96,340
(CIVILIAN/DEP, E/S)			

BASE OPERATIONS—MISSION

RETAIL SUPPLY OPER (\$000)	3,405	3,105	2,826
LINE ITEMS CARRIED (000)	84	85	85
RECEIPTS (000)	100	109	109
ISSUES (000)	98	107	107

OTHER BASE SERVICES (\$000)	15,985	19,261	15,656
NO. OF MOTOR VEHICLES, TOTAL	252	579	586
(OWNED)	225	489	492
(LEASED)	27	90	94

PROGRAM PACKAGE: BASE OPERATIONS (CONT'D)

III. Performance Criteria and EVALUATION      FY 1985      FY 1986      FY 1987

BASE OPERATIONS

OWNERSHIP OPERATIONS

OTHER ENGINEERING SUP (\$000)	7,562	5,286	7,555
ADMINISTRATION (\$000)	4,117	4,102	4,238
NUMBER OF BASES, TOTAL	18	18	18
(CONUS)	17	17	17
(OVERSEAS)	1	1	1
PHYSICAL SECURITY (\$000)		116	2,145
HAZARDOUS WASTE (\$000)	2,921	3,548	5,478

IV. Personnel Summary (End Strenght)    N/A

Department of the Navy  
Operation & Maintenance, Navy  
Exhibit OP-05

Activity Group: Supply Operations  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Supply Systems Command

I. Description of Operations Financed.

Supply Operations under the Naval Supply Systems Command provide: (1) effective response to requisitions for worldwide operations and maintenance requirements of Navy fleet and shore units; (2) timely freight terminal services for the shipment and receipt of material carried by the stock point activities and for the transshipment of material designated for fleet units and other activities throughout the world; and (3) effective supply services to all Navy units other than the filling of requisitions for material or the processing of transshipments. This activity group finances the operations of nine stock point activities located in the United States, engaged in the receipt, storage and distribution of military supply items and the provision of other services such as fueling and procurement support. On 1 October 1985, the Supply Department of the Naval Air Station, Pensacola became a Naval Supply Center under the Naval Supply Systems Command. This activity group also centrally finances acquisition and development of Automatic Data Processing systems which benefit Navy-wide stock point and supply operations. In addition, this activity group finances military support operations of the supply departments at three Naval Shipyards.

This submission incorporates the efficiencies gained as a result of the installation of productivity enhancing projects. As allowed by Department of Defense policy, investment of these productivity savings has been incorporated at the activity level.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout.

		FY 1986			FY 1987	
	FY 1985	Budget Request	Appropriation	Current Estimate	Budget Request	Change
Supply Depots	237,646	258,028	256,857	272,180	301,482	+29,302
Supply Departments at Naval Shipyards	<u>7,752</u>	<u>7,633</u>	<u>7,597</u>	<u>7,501</u>	<u>7,105</u>	<u>-396</u>
Total, Supply Operations	245,398	265,661	264,454	279,681	308,587	+28,906

Activity Group: Supply Operations (Continued)

		<u>Amount</u>
<b>B. <u>Reconciliation of Increases and Decreases.</u></b>		
1.	FY 1986 Current Estimate	\$279,681
2.	Pricing Adjustments	2,495
A.	Stock Fund (472)	
1)	Non-Fuel 472	
B.	Industrial Fund Rates (-6)	
C.	Average Grade Reduction (-224)	
D.	Annualization of Civilian Health Benefits (-208)	
E.	Other Pricing Adjustments (2,461)	
3.	Functional Program Transfers	17,424
A.	Transfers In (17,536)	
1)	Intra-Appropriation Transfer 17,536	
a)	Transfer of the Supply Department of NAS Pensacola from the Chief of Naval Education and Training to establish the Naval Supply Center, Pensacola (8,487).	
b)	Transfer of Preservation and Packaging from NARFs Alameda, Pensacola, Jacksonville, North Island, and Norfolk to NSCs Oakland, Pensacola, Jacksonville, San Diego and Norfolk respectively (9,049).	
B.	Transfer-Out (-112)	
1)	Intra-Appropriation Transfer -112	
a)	Funds to rent commercially leased space transferred to the Navy's Standard Level User Charge program for reimbursement to the General Services Administration's Federal Building Fund .	
4.	Program Increases	13,673
A.	Annualization of FY 1986 Increases (1,759)	
1)	Contract Management Reviews - Annualization of funding for civilian personnel required to perform contract management reviews to allow for improved oversight of Navy contracts. 24	

Activity Group: Supply Operations (Continued)

- 2) Navy Integrated Storage Tracking and Retrieval System (NISTARS) Maintenance - FY 1987 represents the first full year of NISTARS operation at NSC Norfolk and NSC San Diego. In addition, Automated Materials Handling Systems (AMHS) which will be integrated into NISTARS in the future have been installed at NSCs Jacksonville, Puget Sound, and Charleston. These AMHS were installed ahead of NISTARS software implementation in order to reap the productivity benefits of mechanization as early as possible. Funding is required for hardware maintenance to keep the equipment in a fully operational condition. Excessive downtime due to inadequate maintenance or a lack of spare parts would adversely effect delivery of material critical to the fleet. 1,735

B. Other Program Growth in FY 1987 (11,914)

- 1) Storage Aids - NAVSUP stock points currently have a storage space deficit of 32,188 thousand cubic feet. Funds will purchase storage racks which will generate 25 million cubic feet of storage space. In addition to existing deficits, this increase will be required due to the following: the stock fund purchase of \$206 million in mobilization inventories during FY 1986 which will be delivered in FY 1987-88; the increase of \$700 million in stock fund purchases in FY 1985; the increase of 9 cog retention levels from 30 to 48 months; a moratorium on excessing material; the requirement for increased storage capacity as Navy approaches its 600-ship objective; and implementation of new physical distribution enhancements to increase supply responsiveness and improve inventory accuracy. Increased utilization of existing warehouses will improve support to the fleet, prevent the requirement to lease commercial warehouse space, and reduce future MILCON requirements. 637

Activity Group: Supply Operations (Continued)

- 2) Integrated Disbursing and Accounting -  
Funds are required for maintenance of installed ADPE supporting IDA/DX at Navy Supply Centers. Installation of additional ADPE will accommodate additional workload resulting from the Navy-wide realignment of disbursing responsibilities, the consolidation of accounting functions, and the Prompt Payment Act. 822
- 3) Level II Uniform Automated Data Processing System (UADPS) - NAVSUP manages the supply system used by Level II activities. Other ADP support is managed by NAVDAC/NARDAC Washington and Fleet Commands. The lease/maintenance of proprietary software is provided by NARDAC Washington. In FY 1987, the management of other ADP support and responsibility for proprietary software will transition to NAVSUP as additional responsibilities. These new NAVSUP responsibilities will provide centralized management of ADP support for Level II activities and will enhance inventory accuracy and improve material availability at these activities. Requested resources are in support of these additional responsibilities. 811
- 4) Enlisted/Civilian Substitution (CIVSUB) - Civilian end strength are required to provide supply support at the supply centers to offset a loss of enlisted personnel. 22



Activity Group: Supply Operations (Continued)

- 5) Office Automation for Stock Points -  
As part of the Stock Point ADP Replacement (SPAR) Project at the supply centers, office automation will be installed to improve supply center management effectiveness and improve fleet support. Funds will provide for installation of a prototype office automation system at NSC Charleston which will enhance the requirements determination process and increase the productivity and effectiveness of the supply centers. 1,500
- 6) Contract Management Reviews (CMR) -  
Additional end strength are required to perform contract management reviews to allow for improved oversight of Navy Contracts. The number of Navy Field Contracting System activities NAVSUP reviews will increase from the current level of 905 to 975 activities by FY 1987. Among the objective of CMRs are the improvement of Navy Field Contracting System competition rates and the quality of price determination processes. 144
- 7) Project BOSS (Buy Our Spares Smart) -  
Additional end strength and funding are required for expansion of competition initiatives under Project BOSS at the supply centers. The original Navy-wide program projected FY 1989 savings of \$275 million. The expanded program will save \$358 million - an increase of \$83 million. Over the life of the Five Year Defense Plan (FY 1987-FY 1991) savings are increased from \$1.3 billion to \$1.7 billion. Increased competition at the Supply Centers will contribute to the attainment of these savings, which have already been reflected in Navy's budget. 350
- 8) Stock Point ADP Replacement (SPAR) - The objectives of the SPAR project are to replace the computers that support the Uniform Automated Data Processing System for Stock Points (UADPS-SP) and to redesign the UADPS-SP applications programs. The contract for the SPAR ADP system will be awarded in FY 1987. Funds are required for training testbed operators and Central Design Agency (CDA) personnel, maintenance and technical support of the testbed system, conversion of the UADPS-SP programs and contractor assistance in developing the physical data base design and the system/subsystem specifications for modernized UADPS-SP. 3,828

Activity Group: Supply Operations (Continued)

- 9) Stock Point Logistics Integrated Communications Environment (SPLICE) - Resources are required for increased maintenance requirements in FY 1987 for nine SPLICE sites (three Naval Supply Depots, four Navy Regional Contracting Centers, a Marine Corps Air Station, and a Naval Regional Data Automation Center) implemented in FY 1986. During the next phase, FY 1987, eight SPLICE sites (three Naval Air Stations, one NARDAC, three Naval Data Automation Facilities, and the Pacific Missile Test Center) will be implemented, requiring funds for acquisition, installation, training, documentation, site preparation, and maintenance. Also, during FY 1987, the following applications will be downloaded from the Burroughs Systems onto the SPLICE systems at previously installed sites:
- (a) Automation of Procurement and Accounting Data Entry (APADE) will be downloaded to SPLICE at NSCs Pearl Harbor, Oakland, San Diego, and Charleston; (b) G-Condition Management will be downloaded to SPLICE at NSCs Jacksonville, Norfolk, Oakland, and San Diego; (c) UADPS-SP Application "B"-Enhanced (ABE) for receipt processing will be downloaded to SPLICE at NSCs Pearl Harbor, Charleston, and Puget Sound; (d) Navy Automated Transportation Documentation System (NAVADS) will be downloaded to SPLICE at NSCs Pearl Harbor, Charleston, and Puget Sound; and (e) Integrated Disbursing and Accounting (IDA) will be downloaded to SPLICE at NSCs Pearl Harbor and Puget Sound. In downloading these applications, it is necessary to increase the Central Processing Unit/disk capacity at these sites requiring an increase in purchase, installation, and maintenance funding. 1,501
- 10) Logistics Application of Automated Marking and Reading Symbols (LOGMARS) - The LOGMARS program provides bar-coding of materials and consequently enhances other inventory accuracy efforts. This funding will enable the installation of shipboard LOGMARS to keep pace with the accelerated implementation of SNAP II. 2,299

Activity Group: Supply Operations (Continued)

5. Program Decreases

-4,686

A. Other Program Decreases in FY 1987 (-4,686)

- 1) Commercial Activities (CA) Program Savings - Savings associated with conversion to contractor performance or in-house efficiencies resulting from CA studies under OMB Circular A-76. -647
- 2) Efficiency Reviews - Savings projected from scheduled efficiency reviews. -500
- 3) Uninterruptible Power Supply - Decreased requirements in FY 1987 due to a differing number of installations completed during FY 1986 than FY 1987. -7
- 4) President's Private Sector Survey on Cost Control (PPSSCC) Savings - Savings attributable to the implementation of initiatives recommended by the PPSSCC, e.g., the upgrade of computers, and the development of work standards. -640
- 5) Automated Material Handling System (AMHS)/Competency Based Certification (CBC) Savings - Savings resulting from the installation and operation of AMHS at Naval Supply Centers and for productivity gains from training and certification of the physical distribution workforce. -933
- 6) Automated Data Processing (ADP) Lease/Purchase Savings - Savings resulting from the purchase of currently leased ADP equipment. -1,449
- 7) Travel - Reduction due to the curtailment of administrative travel. -38
- 8) G-Condition Management Savings - Savings from implementing a system to track depot level repairables during the repair process. -100
- 9) Office Automation Savings - Savings from implementing office automation at stock points. -300
- 10) Reduction in resources to establish a centralized adjudication facility for personnel security clearances at the Naval Investigative Service Command (NISC) -72

6. FY 1987 President's Budget Request

\$308,587

Activity Group: Supply Operations (Continued)

III. Performance Criteria.

The following table summarizes program requirements:

<u>Program Output</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Line Items issued and received (000)	<u>13,510</u>	<u>14,311</u>	<u>14,529</u>
NSCs	11,976	12,758	12,965
NPFC	1,534	1,553	1,564
Physical Distribution Resourcing Units (000)	12,795	14,630	14,878
Measurement tons of cargo handled (000)	8,421	8,957	8,091
Warehouse Refusal Rate	0.7%	0.7%	0.7%
Barrels of fuel throughput (000)	79,360	81,453	82,770
Line Items screened for credit (000)	1,012	1,081	1,092
Purchase requests completed (000)	687	711	728
% of contracts awarded competitively	83.1%	84.0%	86.0%

IV. Personnel Summary. (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>	<u>292</u>	<u>303</u>	<u>351</u>
Officer	179	187	235
Enlisted	113	116	116
B. <u>Civilian</u>	<u>8,265</u>	<u>7,982</u>	<u>8,503</u>
USDH	8,265	7,982	8,503

Department of the Navy  
Operation & Maintenance, Navy  
Exhibit OP-05

Activity Group: Inventory Control Operations  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Supply Systems Command

I. Description of Operations Financed.

The mission of the Naval Supply Systems Command's Inventory Control Points is support of Navy and Marine Corps weapon systems, aircraft, and ship readiness by establishing and maintaining total secondary (repairable and consumable) item supply support necessary for their operation and maintenance, and providing supply support for certain items to other services.

This activity group finances the operation of inventory control point activities engaged in the management of secondary item supply support for operation and maintenance requirements of the fleet and shore establishment, and for the design, implementation, and maintenance of standardized logistics and related financial management systems. The objective of these systems is to improve fleet readiness, support weapon systems, and provide for economies in supply operations and inventory investment. This submission includes resources to improve spare parts acquisition through breakout and increased competition in the procurement process.

This submission incorporates the efficiencies gained as a result of the installation of productivity enhancing projects. As allowed by Department of Defense policy, reinvestment of these productivity savings has been incorporated at the activity level.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout.

		FY 1986			FY 1987	
	FY 1985	Budget Request	Appropriation	Current Estimate	Budget Request	Change
Inventory Control Operations	<u>229,086</u>	<u>245,873</u>	<u>247,766</u>	<u>251,450</u>	<u>272,367</u>	<u>+20,917</u>
Total, Inventory Control Operations	229,086	245,873	247,766	251,450	272,367	+20,917

Activity Group: Inventory Control Operations (Continued)

<u>B. Reconciliation of Increases and Decreases.</u>		<u>Amount</u>
1. FY 1986 Current Estimate		\$251,450
2. Pricing Adjustments		2,480
A. Stock Fund	112	
1) Non-Fuel	112	
B. Industrial Fund Rates	(203)	
C. Average Grade Reduction	(-600)	
D. Annualization of Civilian Health Benefits	(-169)	
E. Other Pricing Adjustments	(2,934)	
3. Functional Program Transfers		-
4. Program Increases		27,043
A. Annualization of FY 1986 Increases	(509)	
1) Project BOSS (Buy Our Spares Smart)		
- Annualization of FY 1986 growth to accomplish the breakout of spare parts from sole source buys to increase competition.	54	
2) TRIDENT - Annualization of FY 1986 end strength to support increased Consolidated Shipboard Allowance List (COSAL) and Consolidated Shore Base Allowance List (COSBAL) maintenance/update requirements for increased TRIDENT ship population.	114	
3) ICP Increased Workload - Annualization of FY 1986 personnel increases to perform the inventory control functions of provisioning and outfitting in support of the 600-ship Navy.	341	
B. Other Program Growth in FY 1987	(26,534)	
1) Project BOSS (Buy Our Spares Smart) - Increased end strength and funding for contractor support will expand the Project BOSS effort by increasing the number of spare parts to be broken out to competition from 14,200 to 23,000 per year and increasing the percentage of contracts awarded on a competitive basis from 32% to 35%. This increase is required to keep pace with growing procurement workload (+5% in FY 1987) and the ever increasing emphasis being placed on defense procurement practices. The expanded BOSS program will save \$358 million in FY 1989 -		

Activity Group: Inventory Control Operations (Continued)

- an increase of \$83 million over original BOSS program savings of \$275 million. Over the Five Year Defense Plan (FYDP) (FY 1987-1991), savings are increased from \$1.3 billion to \$1.7 billion. 12,113
- 2) Physical Security - Resources  
will be used for security upgrades at Inventory Control Points required by Department of Defense (DOD) and Department of Navy (DON) security guidance to reduce vulnerability to terrorism. Funds will be used to provide lighting, locks and other security measures. 740
- 3) UICP Resolicitation - Funding is required to ensure that UICP Resolicitation progresses within established timeframes. Resources will be used for transition training and continued lease of currently installed hardware. Funds will also be used for rental of an additional IBM 3081 system to maintain uninterrupted operations when ADP hardware at the Ships Parts Control Center (SPCC) moves to the new computer center currently under construction and to fund the cost of physically relocating all installed computer equipment to the new center. 3,800
- 4) Navy Integrated Storage, Tracking and Retrieval System (NISTARS) - Additional funding is required to provide software support for NISTARS in order to properly maintain the Navy's investment in this system and to keep it fully operational at all times. This effort will be performed by the Fleet Material Support Office. 117

Activity Group: Inventory Control Operations (Continued)

- 5) Data Base Accuracy - The need to correct inaccuracies in the ICP data base has been addressed by GAO (Report #NSTAD-83-48 of 19 Aug 1983). That report pointed out how extensively the information in the ICP computer files is used in the decision making process and that inaccurate data results in the erroneous expenditure of supply dollars and the degradation of readiness of operating forces. Technology now permits corrective action keyed to UICP Resolicitation which presents the first opportunity since the mid-60's to scrub file structures and posture for the next twenty years. Without correction, new interfile transactions under Resolicitation will be frustrated, thereby negating a major benefit of this major acquisition effort. 930
- 6) Defense Data Network (DDN) - DDN is an OSD-directed telecommunications network to provide long-distance (greater than 50 miles) communication requirements for the Department of Defense community. DDN replaces existing telecommunications networks, dedicated lines, and manual methods for massive data transfer. A complete DDN system, as defined by the Defense Communications Agency, is comprised of seven levels of application, or "sophistication". Levels I and II were achieved in FY 1985. Levels III through V will be achieved in FY 1986, and Levels VI and VII will become available in FY 1987. DDN will allow communication from an application on one type of equipment to an application on a different type of equipment without manual intervention. Achievement of Level VII is required in order to realize any cost avoidance from DDN. 236



Activity Group: Inventory Control Operations (Continued)

- 7) Inventory Accuracy Afloat - Resources are required to improve inventory accuracy afloat. We have made considerable progress over the past few years in improving inventory accuracy at shore activities. The impetus for this effort was a great deal of Congressional interest. The Navy must now take action to improve inventory accuracy aboard Navy ships in order to preclude the possibility of similar criticism in this area. Inventory accuracy afloat will be improved through training, the establishment of inventory assistance teams, communications improvements and Shipboard Non-Tactical ADP Program (SNAP) training software. In addition to improved inventory accuracy, a benefit of this effort will be increased material availability for afloat units. 2,900
- 8) CAIMS Secure Network - The current CAIMS Secure Network terminals and printers at 42 user activities will be replaced with leased (with option to buy) equipment during FY 1986. FY 1987 funds will be used to procure equipment at the majority of sites in accordance with the CAIMS Executive Committee direction that NAVSUP centrally manage and fund the CAIMS Secure Network. The buy-out of this equipment will save \$1.7 billion over the eight year life of the contract. These savings have already been incorporated into the overall program requirements. 712
- 9) Nuclear Support Workload - End strength and funding are required to provide for increased effort in provisioning, procurement, quality assurance for NAVSEA (SEA 08) special projects, and other functions which support the Nuclear program. Nuclear reactor program workload has increased by over 75 percent. Backlogs have increased by up to 500 percent. These additional resources are required in order to meet the support requirements of the nuclear fleet. 790

Activity Group: Inventory Control Operations (Continued)

- 10) Expediting Deployed C-2 Casualty Reports (CASREPS) - Funds are required to provide dedicated expeditors to satisfy high-priority, mission-degrading requisitions. Expected benefits are a 25 percent reduction in mission essential weapons system downtime for parts, increased mission readiness and operational availability of forward deployed ships, and increased management control of two-thirds of deployed CASREPS. 1,000
- 11) TRIDENT Support - An additional end strength is required to support increased allowance list maintenance/update requirements for the increased TRIDENT ship population. 14
- 12) ICP Workload - Additional end strength and funding are required to perform inventory control functions as we move toward the 600 Ship Navy. This increase is required in the technical review and provisioning areas. 256
- 13) President's Private Sector Survey on Cost Control (PPSSCC) - Travel costs are required for the implementation of an Integrated Logistics Career Development Program for Supply Corps Officers. 58
- 14) Navy Standard Technical Information System (NSTIS) - Funds are required to provide site preparation, data base clean-up, data base loading, and acquisition documentation for this mandated program. NSTIS will provide an automated technical data distribution system between Navy activities and defense contractors which will result in better pricing of material, reduction in Procurement Administrative Lead-Time, and increased responsiveness to procurement information requests. 1,800
- 15) Integrated Disbursing and Accounting - Funds are required for maintenance of installed automatic data processing equipment (ADPE) supporting IDA/DX at Inventory Control Points. Installation of additional ADPE will accommodate additional workload resulting from the Navy-wide realignment of disbursing responsibilities, the consolidation of accounting functions, and the Prompt Payment Act. 609

Activity Group: Inventory Control Operations (Continued)

- 16) Industrial Preparedness Planning -  
NAVSUP has the tri-service lead for the Rapid  
Acquisition of Manufactured Parts (RAMP)  
program. Funding is required for developing  
a plan for implementation of a manufacturing  
technology for use at the parts supplier  
level. 356
- 17) Uninterruptible Power Supply - Funds are  
required for the installation of additional  
power distribution units at both the  
Aviation Supply Office (ASO) and the  
Ships Parts Control Center (SPCC). 103

5. Program Decreases

-8,606

- A. One-Time FY 1986 Costs (-2,946)
  - 1) UICP Resolicitation Portability -  
Portability allows software to be  
compatible with various brands of  
ADP hardware. The required software  
modifications and training of  
personnel will be completed by the end  
of FY 1986. -2,946
- B. Other Program Decreases in FY 1987 (-5,660)
  - 1) Commercial Activities Program - Savings  
associated with conversion to  
contractor performance or in-house  
efficiencies resulting from CA studies  
under OMB circular A-76. -83
  - 2) Efficiency Reviews - Savings projected  
from scheduled efficiency reviews. -700
  - 3) President's Private Sector Survey  
on Cost Control (PPSSCC) Savings -  
Savings attributable to the implemen-  
tation of component standardization  
and computer upgrades. -421

Activity Group: Inventory Control Operations (Continued)

- 4) Military Standard Contract Administration Procedures (MILSCAP) - MILSCAP provides uniform procedures for the interchange of contract data between the military services and contract administration offices. In FY 1986, the major efforts required to implement this system, e. g., specification and design development, will be completed. -2,065
- 5) Integrated Disbursing and Accounting (IDA) Savings - Reduced resource requirements for non-IDA accounting systems as IDA is implemented. -113
- 6) Shipboard Non-tactical ADP Program (SNAP) - Decreased effort being performed at the Fleet Material Support Office. -28
- 7) Aviation Depot Level Repairables - Completion of the training of personnel in the areas of carcass tracking retrograde management and report generation under the AVDLR concept in FY 1986. -1,730
- 8) Automated Data Processing (ADP) Lease/Purchase Savings - Savings resulting from the purchase of currently leased ADP equipment. -143
- 9) Reduction due to the curtailment of administrative travel. -133
- 10) Aviation Supply Office (ASO) Field Representatives (AFRs) - Decreased requirement for AFRs support primarily of the A-6 and F-14 aircraft. -244

6. FY 1987 President's Budget Request

\$272,367

Activity Group: Inventory Control Operations (Continued)

III. Performance Criteria.

The following table summarizes program requirements:

<u>Program Output</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Line Items Managed (000)	626	630	635
Items Selected for Provisioning (000)	771	785	801
Percent of Contracts to be Awarded Competitively	31.0%	32.0%	35.0%
Purchase Requests (000)	222	244	256
Technical Reviews (000)	558	564	570
Requisitions Processed (000)	2,430	2,506	2,584

IV. Personnel Summary. (End-Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>	<u>261</u>	<u>269</u>	<u>292</u>
Officer	183	185	208
Enlisted	78	84	84
B. <u>Civilian</u>	<u>6,250</u>	<u>5,826</u>	<u>6,275</u>
USDH	6,250	5,826	6,275

Department of the Navy  
Operation & Maintenance, Navy  
Exhibit OP-05

Activity Group: Procurement Operations  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Supply Systems Command

I. Description of Operations Financed.

The purpose of Procurement Operations is to provide effective procurement services, centralized administration of specialized supply programs, and project management support of fleet hospital units and other programs such as various automated management systems, ADP security, and Local Area Network.

Funding under this activity group finances four Regional Contracting Centers (NRCCs) and special programs which are administered at the Headquarters, Naval Supply Systems Command. In addition, under the Fleet Hospital Program, funds are provided for the world-wide prepositioning of selected, modular units which comprise the hospitals, setting up and maintaining medical supply and other logistics support systems for their continued operation under war-time conditions, and all operations associated with the acquisition process.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout.

		FY 1986			FY 1987	
		Budget	Appro-	Current	Budget	
	<u>FY 1985</u>	<u>Request</u>	<u>priation</u>	<u>Estimate</u>	<u>Request</u>	<u>Change</u>
Supply Systems Services	35,276	59,505	46,147	20,317	22,356	+2,039
Navy Regional Contracting Offices	15,335	17,905	18,295	15,519	14,799	-720
Fleet Hospital Program	3,698	11,192	11,188	11,191	12,007	+816
Project Management Office	<u>3,438</u>	<u>1,010</u>	<u>1,079</u>	<u>6,133</u>	<u>12,015</u>	<u>+5,882</u>
Total, Procurement Operations	57,747	89,612	76,709	53,160	61,177	+8,017

Activity Group: Procurement Operations (Continued)

B. <u>Reconciliation of Increases and Decreases.</u>	Amount
1. FY 1986 Current Estimate	\$53,160
2. Pricing Adjustments	1,487
A. Civilian Personnel Compensation (Direct) (15)	
1) Foreign National Direct Hire Pay Adjustment 15	
B. Stock Fund (39)	
1) Non-Fuel 39	
C. Industrial Fund Rates (537)	
D. Average Grade Reduction (-77)	
E. Annualization of Civilian Health Benefits (-16)	
F. Other Pricing Adjustments (989)	
3. Functional Program Transfers	483
A. Transfers in (520)	
1) Intra-Appropriation 520	
a) Transportation Coordination Automated Command and Control Information System (TCACCIS) transferred from the Chief of Naval Operations.	
B. Transfers Out (-37)	
1) Intra-Appropriation -37	
a) Funds to rent commercially leased spaced transferred to the Standard Level User Charge program for reimbursement to the General Services Administration's Federal Building Fund.	
4. Program Increases	10,555
A. Annualization of FY 1986 Increases (107)	
1) Contract Management Reviews - Annualization of FY 1986 end-strength growth required to perform contract management reviews to allow for improved oversight of Navy contracts. 26	
2) Navy Regional Contracting Center Workload - Annualization of resources required to perform the contractual workload as we move toward the 600 ship Navy. 81	

Activity Group: Procurement Operations (Continued)

- B. Other Program Growth in FY 1987 (10,448)
- 1) Servicewide Transportation (SWT)  
Budget Automation - Resources will provide for the automation of the SWT budget, freeing analysts from time-consuming manual efforts and allow for more time to examine transportation cost data. This will result in better management of this \$400 million program in future years. 97
  - 2) Automated Materials Handling System (AMHS) Engineering Support - Resources will provide contractor support in the development of specifications, requirement studies, source selection plans and procurement support for various AMHS and future Navy Integrated Storage, Tracking, and Retrieval System (NISTARS) installations. 571
  - 3) Navy Material Transportation Office (NMTO) Operation and Management Information System (NAOMIS) - Resources will provide funds to contract for the development of a comprehensive ADP system to meet the functional requirements at NAVMTO. In response to deficiencies raised by audits and inspections, the system will correct ADP deficiencies and improve efficiencies such as elimination of duplicate payments and automation of pre-audit of payments for domestic freight bills. Full implementation of this system (FY 88/89) will result in better financial management and in cost avoidances of \$11.5 million per year. 847
  - 4) ADP Security - This funding will provide: upgrades to existing microcomputers to include security features; backup capabilities such as commercial backup sites; training for ADP security personnel; procurement of software for password creation, security administration and penetration routines; testing of contingency plans; and other miscellaneous ADP security hardware. 1,768



Activity Group: Procurement Operations (Continued)

- 5) Local Area Network (LAN) - LAN is an integrated Information management system to be implemented at Naval Supply Centers. LAN allows communication between the various ADP users of a given activity. Funding will provide for the installation of a prototype system at NSC Charleston. 100
- 6) Transportation Management OPTEMPO System (TMOS) - Resources will provide NAVSUP with funding to acquire and install an ADP system which will improve support to the fleet by efficient routing and tracking of shipments, and provide financial and transportation managers with the tools needed to properly plan and execute an efficient and economical transportation system. 1,400
- 7) Navy Regional Contracting Center Workload - Resources to perform some of the additional procurement workload at Navy Regional Contracting Centers resulting from the Navy's growth toward a 600 ship level. Anticipated annual growth in procurement actions is approximately 4%. 107
- 8) Enlisted/Civilian Substitution - End strength to replace two enlisted personnel at the Fleet Hospital Support Office. 22
- 9) Fleet Hospital Program - Resources and end strength to fully staff the Fleet Hospital Support Office, Alameda to handle increased workload under the integration and warehouse contract (FHIWOC). The FHIWOC provides for the receipt and warehousing, kit assembly, preservation, packing and integration of fleet hospital units. 1,070
- 10) Contract Management Reviews -(CMRs) Additional resources are required to help meet the increasing number of reviews to be accomplished. The number of Navy Field Contracting System (NFCS) activities NAVSUP reviews will increase from the current level of 904 to 975 in FY 1987. Among the objectives of CMRs are the improvement of Navy Field Contracting System competition rates and pricing techniques. 13

Activity Group: Procurement Operations (Continued)

11)	Enlisted Dining Facilities - Resources are required to continue the implementation of item pricing methods and automated head count systems at CONUS shore-based enlisted dining facilities. Funding requested will provide for installation of the necessary hardware.	139
12)	Project BOSS (Buy Our Spares Smart) - Additional resources are required to support the Advanced Logistics Technology Division of PML-550. PML-550 is responsible for development of the Navy Standard Technical Information System (NSTIS), Navy Logistics R&D initiatives, Mobile Fuels Technology, Small Business Innovative Research (SBIR), and Logistics Independent R&D.	303
13)	Project BOSS (Buy Our Spares Smart): Price Fighter - Resources are required for expansion of the price fighter team to perform intrinsic value analysis and establish "should-cost" prices for spares parts. The Price Fighter group will review approximately 14,000 spare parts in FY 1987, 17% more than programmed in FY 1986.	3,131
14)	TCACCIS - Resources are required to improve deployment readiness of Navy shore based units such as construction battalions and cargo handling battalions in peacetime, excersices, and contingencies. 880	
5.	Program Decreases	-4,508
A.	One-Time FY 1986 Costs	(-3,553)
1)	Automated Data Processing Equipment (ADPE) - Reduction in required funding due to the buy-out of leased ADP equipment in FY 1986.	-3,553

Activity Group: Procurement Operations (Continued)

B. Other Program Decreases in FY 1987	(-955)
1) Reduction associated with DON initiatives to streamline the organizational and program management structure of the Naval Material establishment.	-30
2) Efficiency Reviews - Savings projected from scheduled efficiency reviews.	-200
3) Aviation Depot Level Repairables (AVDLRs) - Decreased requirements for contractor support in converting AVDLRs to stock fund. Requirement involved training Navy personnel involved in managing AVDLRs in such areas as carcass tracking, transshipment tracking and requisitioning procedures.	-175
4) Shop and Office Equipment - Reduction in funding required for the procurement of new equipment or the replacement of equipment beyond economical repair. Items are used at Navy Supply Centers, Inventory Control Points and Navy Regional Contracting Centers. Items include reader/printers, calculators, training aids, files, and cleaning equipment.	-30
5) Travel - Reduced travel requirements due to efforts to curtail administrative travel.	-85
6) Automation of Procurement and Accounting Data (APADE) - Reduction in required resources due to completion of prototyping at Naval Supply Center, Norfolk.	-340
7) Logistics Data Communications (LDC) - Reduction in requirements due to varying numbers of installations completed between FY 1986 and FY 1987.	-80
8) Lease of Automated Data Processing Equipment (ADPE) - Reduction in lease costs as a result of buying out currently leased ADPE.	-15

6. FY 1987 President's Budget Request

\$61,177

Activity Group: Procurement Operations (Continued)

III. Performance Criteria.

The following table summarizes program requirements:

<u>Program Output</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Number of Local Procurement Offices Provided Technical Direction.	905	930	975
No. of Procurement Actions (000)	81	84	87
Percent of Contracts to be Awarded Competitively	49.2%	50.0%	51.0%

IV. Personnel Summary. (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>	<u>123</u>	<u>145</u>	<u>156</u>
Officer	88	110	123
Enlisted	35	35	33
B. <u>Civilian</u>	<u>663</u>	<u>611</u>	<u>661</u>
USDH	625	585	635
FNDH	38	26	26

Department of the Navy  
Operation & Maintenance, Navy  
Exhibit OP-05

Activity Group: Command and Administration  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Supply Systems Command

I. Description of Operations Financed.

The mission of the Naval Supply Systems Command Headquarters is to manage and provide technical direction to major logistics subsystems which directly support ships, aircraft, weapon systems, and personnel of the operating forces ashore and afloat. Funds under the Command and Administration activity group finance the operation of the Naval Supply Systems Command Headquarters which manages and provides technical direction to the following logistics subsystems:

- An integrated Navy supply system responsible for providing secondary item support Navy-wide to fleet units and shore installations
- A purchasing system which provides Navy-wide support in procuring products and services from commercial suppliers
- A transportation system responsible for Navy-wide first and second destination movement of material
- A financial system with Navy-wide responsibility for payroll; operating expense, inventory, and plant property accounting; and disbursing
- A resale system involving the management of the Navy's Commissary and Exchange systems, including the operation of ships' stores, barber shops, laundry facilities afloat, and retail clothing stores
- A publications and printing service which has Navy-wide responsibility for printing requirements, and
- A food service system with technical responsibility for the food service operations of the Navy.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout.

		FY 1986			FY 1987	
	FY 1985	Budget Request	Appropriation	Current Estimate	Budget Request	Change
Command	<u>31,071</u>	<u>33,321</u>	<u>31,176</u>	<u>30,270</u>	<u>37,211</u>	<u>+6,941</u>
Total, Command Administration	31,071	33,321	31,176	30,270	37,211	+6,941

Activity Group: Command and Administration (Continued)

<u>B. Reconciliation of Increases and Decreases.</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$30,270
2. Pricing Adjustments	315
A. Industrial Fund Rates	(4)
B. Average Grade Reduction	(-408)
C. Annualization of Civilian Health Benefits	(-6)
D. Other Pricing Adjustments	(725)
3. Functional Program Transfers	-513
A. Transfers Out	(-513)
1) Intra-Appropriation	-513
a) Funds to rent commercially leased space transferred to the Standard Level User Charge program for reimbursement to the General Services Administration's Federal Building Fund.	
4. Program Increases	8,292
A. Other Program Growth in FY 1987	(8,292)
1) Funding for a classified project.	8,281
2) Civilian Substitution of Enlisted Personnel - Substitution of one enlisted billet with one civilian end strength at NAVSUP Headquarters.	11
5. Program Decreases	-1,153
A. Annualization of FY 1986 Decreases	(-812)
1) Reductions associated with Department of the Navy initiatives to streamline the organizational and program management structure of the Naval Material establishment.	-812
B. Other Program Decreases in FY 1987	(-341)
1) Reduction in contractual services for ADP resulting from the procurement of personal computers for Headquarters' personnel.	-338
2) Reduction in requirements due to the curtailment of administrative travel.	-3
6. FY 1987 President's Budget Request	\$37,211

Activity Group: Command and Administration (Continued)

III. Performance Criteria.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Number of Field Activities Managed	168	169	169

FY 1985 to FY 1986 increase due to the establishment of NSC Pensacola.

Number of Civilian Personnel Managed	26,478	25,770	26,052
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IV. Personnel Summary. (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>	<u>74</u>	<u>77</u>	<u>76</u>
Officer	64	68	68
Enlisted	10	9	8
B. <u>Civilian</u>	<u>389</u>	<u>323</u>	<u>324</u>
USDH	389	323	324

Department of the Navy  
Operation & Maintenance, Navy  
Exhibit OP-05

Activity Group: Field Operations  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Supply Systems Command

I. Description of Operations Financed.

Field Operations under the Naval Supply Systems Command provide for the management of Navy material transportation, for the centralized management of the Navy's food service program, and for the overall management of Navy fuel operations worldwide.

Funds under this activity group finance the operation (i.e., salaries and office support) of the following activities: the Naval Material Transportation Office, the Navy Food Service Systems Office, the Navy Petroleum Office, and Operational Support-Field.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout.

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appro- priation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Miscellaneous						
Field Operations	5,996	6,516	6,670	6,620	6,745	+125
Operational Support- Field	<u>1,056</u>	<u>1,002</u>	<u>1,032</u>	<u>1,056</u>	<u>976</u>	<u>-80</u>
Total, Field Operations	7,052	7,518	7,702	7,676	7,721	+ 45



Activity Group: Field Operations (Continued)

<u>B. Reconciliation of Increases and Decreases.</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$7,676
2. Pricing Adjustments	-20
A. Industrial Fund Rates	(5)
B. Average Grade Reduction	(-68)
C. Annualization of Civilian Health Benefits	(-6)
D. Other Pricing Adjustments	(49)
3. Functional Program Transfers	30
A. Transfers In	(30)
1) Intra-Appropriation	30
a) Responsibility for computing fuel war reserve requirements from the Chief of Naval Operations to the Navy Petroleum Office.	
4. Program Increases	242
A. Other Program Growth in FY 1987	(242)
1) Navy Material Transportation Office - End strength and resources are required to process workload increases in the following areas: Government Transportation Request (GTR) processing, +7%; Do-It-Yourself (DITY) move vouchers, +16%; Government Bill of Lading (GBL) processing, +8%; Meal Ticket vouchers, +29%; data entry, +8%.	242
5. Program Decreases	-207
A. Annualization of FY 1986 Decreases	(-195)
1) Reductions associated with DON initiatives to streamline the organizational and program management structure of the Naval Material establishment.	-195
B. Other Program Decreases in FY 1987	(-12)
1) Reduction in requirements due to a curtailment of administrative travel.	-10
2) Lease of Automated Data Processing Equipment (ADPE) - Reduction in lease costs as a result of buying out leased ADPE.	-2
6. FY 1987 President's Budget Request	\$7,721

Activity Group: Field Operations (Continued)

III. Performance Criteria.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Number of Food Service Locations Managed	680	685	690
Number of Fuel Facilities Provided Technical Guidance	115	115	115

IV. Personnel Summary. (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>	<u>30</u>	<u>14</u>	<u>20</u>
Officer	27	10	16
Enlisted	3	4	4
B. <u>Civilian</u>	<u>216</u>	<u>212</u>	<u>234</u>
USDH	216	212	234

Department of the Navy  
Operation and Maintenance, Navy  
Exhibit OP-05

Activity Group: Servicewide Transportation  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Supply Systems Command

I. Description of Operations Financed.

The Servicewide Transportation (SWT) program provides funding for the majority of the Navy's worldwide cargo movements. This includes first destination transportation (FDT), second destination transportation (SDT), and continental United States terminal services in conjunction with first and second destination transportation. First destination transportation costs are associated with the movement of material, after purchase on a Free-On-Board origin basis, from the contractors' facilities to the first point of use or storage. The program also provides the financing for the worldwide second destination movement of regular and emergency readiness material including ammunition, chemicals, medicine, subsistence items, mail, repair parts, and high value repairable items.

The SWT program finances the purchase of transportation services predominantly from DOD industrially-funded transportation activities, the Military Airlift Command (MAC), the Military Sealift Command (MSC), and the Military Traffic Management Command (MTMC). In addition, SWT purchases transportation services from private sector firms. These include aircraft, truck, rail, bus, barge and freight forwarding services.

It should be emphasized that this is a Navy-wide program. The volume of the program is driven by a variety of factors, most significantly the operating tempo and readiness requirements of the fleet and the level of deliverables from programmed procurements.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout.

		FY 1986			FY 1987	
	FY 1985	Budget Request	Appropriation	Current Estimate	Budget Request	Change
Servicewide Transportation	<u>398,678</u>	<u>394,760</u>	<u>381,760</u>	<u>384,818</u>	<u>384,088</u>	<u>-730</u>
Total, Servicewide Transportation	398,678	394,760	381,760	384,818	384,088	-730

Activity Group: Servicewide Transportation (Continued)

<u>B. Reconciliation of Increases and Decreases</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$384,818
2. Pricing Adjustments	-3,432
A. Industrial Fund Rates	(-9,624)
B. Other Pricing Adjustments	(6,192)
3. Functional Program Transfers	-
4. Program Increases	6,815
A. Other Program Growth in FY 1987	(6,815)
1) Increased transportation requirements to support deliveries of Aircraft Procurement, Navy; Shipbuilding and Conversion, Navy; Weapons Procurement, Navy; Other Procurement, Navy; and Operations and Maintenance, Navy materials. Modal distribution: MAC -43 short tons; MSC 27,090 measurement tons; Inland 12,631 short tons; MTMC 7,358 measurement tons.	2,953
2) Increased second destination requirements supporting increases in ships (+2.3% over FY 1986), aircraft (+2.4% over FY 1986) military personnel (+1.2 % over FY 1986), and flying hours (+5.2% over FY 1986). Modal distribution is: MAC 589 short tons; MSC 12,732 measurement tons; MTMC 7,861 measurement tons; and Inland 4,770 short tons.	3,270
3) Increased second destination transportation requirements for Project Tent Camp PACKUP. Tent camps are used as temporary berthing facilities for an entire Construction Battalion (approximately 750 persons) when deployed for a military construction project (Costs continue into outyears). Modal distribution: MSC 2,610 measurement tons; MTMC 2,610 measurement tons.	330
4) Increased second destination transportation movements of furniture, furnishings, and equipment as initial outfitting to newly constructed Navy facilities in the North and South Atlantic, Caribbean, Europe, Africa and Middle East. Modal distribution: MSC: 609 measurement tons; MTMC: 609 measurement tons; and Inland: 842 short tons.	127

Activity Group: Servicewide Transportation (Continued)

5)	Increased first and second destination transportation for support of the Air Traffic Control Program. This includes movements of Long-Range Radars, Precision Approach Radars, Tactical Air Navigation and communication equipment. Modal distribution: MSC: 230 measurement tons; MTMC 230 measurement tons; Inland: 77 short tons.	46
6)	Increased second destination transportation for airlift support to classified exercises in the North Atlantic. Modal Distribution: MAC: 5 short tons.	6
7)	Increased first destination transportation for support of the aircraft (F-21A) Transfer program with Israel. Modal Distribution: MSC: 397 measurement tons; MTMC: 397 measurement tons; Inland: 155 short tons.	83
5.	Program Decreases	-4,113
A.	Annualization of FY 1986 Decreases	(-1,472)
1)	Annualization of savings attributed to the DOD audit of freight bills.	-1,472
B.	One-Time FY 1986 Costs	(-2,483)
1)	Decreased transportation requirements due to completion of ammunition off-load from Near-Term Prepositioning Ships (NTPS) for rework and rehabilitation. Modal Distribution: MSC: -7,692 measurement tons; Inland: -3,000 short tons.	-1,899
2)	Decreased transportation requirements due to completion of construction on Diego Garcia and the subsequent return of Construction Battalion Equipment to CONUS. Modal Distribution: MSC: -4,500 measurement tons.	-584
C.	Other Program Decreases in FY 1987	(-158)
1)	Decreased transportation requirements to support the Collateral Equipment Program. Modal Distribution: Inland: -1,856 short tons.	-158
6.	FY 1987 President's Budget Request	\$384,088

Activity Group: Servicewide Transportation (Continued)

III. Performance Criteria.

See Attachment A.

IV. Personnel Summary.

There are no military or civilian personnel associated with this activity group.

PROGRAM DATA

First Destination Transportation  
by Mode of Shipment:

Military Airlift Command

Regular

Channel (ST)

SAAM (MSN)

LOGAIR (ST)

Military Sealift Command

Regular

Routes (MT)

Per Diem (SD)

Military Traffic

Management Command

Port

Handling (MT)

Commercial

Air (ST)

Surface (ST)

TOTAL

	FY 1985		FY 1986		FY 1987	
	UNITS	\$000	UNITS	\$000	UNITS	\$000
Regular						
Channel (ST)	3,894	8,291	4,021	7,051	3,979	7,299
SAAM (MSN)	34	1,688	29	1,229	28	1,263
LOGAIR (ST)	-	-	-	-	-	-
Military Sealift Command						
Regular						
Routes (MT)	99,962	6,372	116,342	9,134	143,944	9,486
Per Diem (SD)	-	-	-	-	-	-
Military Traffic						
Management Command						
Port						
Handling (MT)	75,127	2,678	90,859	2,815	98,728	3,081
Commercial						
Air (ST)	4,670	2,868	4,859	3,079	4,963	3,281
Surface (ST)	189,958	31,656	187,500	32,300	198,372	35,599
TOTAL		53,553		55,608		60,009

PROGRAM DATA

	FY 1985		FY 1986		FY 1987	
	UNITS	\$000	UNITS	\$000	UNITS	\$000
<u>Second Destination Transportation</u>						
<u>by Mode of Shipment:</u>						
<u>Military Airlift Command</u>						
Regular						
Channel (ST)	54,771	119,476	54,816	98,349	55,410	103,885
SAAM (MSN)	111	5,600	112	4,724	112	5,088
LOGAIR (ST)		-		-		-
<u>Military Sealift Command</u>						
Regular						
Routes (MT)	1,062,364	64,488	1,060,798	78,515	1,064,673	64,432
Per Diem (SD)	665	7,800	665	8,073	665	8,396
<u>Military Traffic Management Command</u>						
Port						
Handling (MT)	795,388	24,725	790,686	20,154	801,882	20,531
Commercial						
Air (ST)	39,081	61,654	33,349	60,539	33,667	63,562
Surface (ST)	502,959	61,382	465,985	58,856	486,310	58,185
TOTAL		345,125		329,210		324,079
<u>Total First and Second Destination Transportation</u>						
		398,678		384,818		384,088



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PROGRAM DATA

Second Destination Transportation

by Selected Commodity:

	FY 1985		FY 1986		FY 1987	
	UNITS	\$000	UNITS	\$000	UNITS	\$000
Cargo (ST)	502,417	194,613	549,736	169,969	552,929	175,429
(MT)	1,118,165	50,408	1,110,221	51,792	1,118,201	45,473
(SD)	565	7,800	665	8,073	665	8,396
(MSN)	111	5,600	112	4,724	112	5,088
Commissaries (MT)	297,623	14,002	298,980	16,670	302,317	14,271
Base Exchanges (MT)	285,149	16,510	286,223	20,663	289,650	17,347
Subsistence (ST)	844	1,842	845	1,516	854	1,601
(MT)	133,353	7,371	132,508	8,423	132,551	6,935
Overseas Mail:						
Surface (MT)	23,461	922	23,552	1,121	23,835	937
Air (ST)	3,549	46,057	3,569	46,259	3,603	48,602
TOTAL		345,125		329,210		324,079

Department of the Navy  
Operation & Maintenance, Navy  
Exhibit OP-05

Activity Group: Retail Sales Operations  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Supply Systems Command

I. Description of Operations Financed.

The Retail Sales Operations Activity Group provides funding for the operation of commissary stores world wide, regional distribution centers, and management organizations. The activity group contains two subactivity groups - Commissary Operations and Retail Clothing Stores/Ships' Stores Afloat.

The mission of the Navy's Commissary Operations is to provide items for sale to authorized commissary store patrons at the lowest practicable price in a facility designed and operated similar to the standards used in commercial food stores. Savings realized by member families purchasing goods from commissaries are a vital incentive for the retention of service members and could even be considered part of the enlistment contract. The commissary privilege is very important to enlisted personnel, especially to the E-4 through E-6 ranks, and junior officers.

Retail Clothing Stores provide a convenient and reliable source from which authorized personnel may obtain government-procured articles of uniform clothing and related items. Ships' Stores Afloat provide a convenient and reliable source from which personnel aboard ships may obtain articles and services for their health and comfort. This sub-activity group provides for reimbursement to Navy exchanges and the Navy Resale and Services Support Office (NAVRESSO) for staff services expended in support of government-procured articles of uniforms at Navy exchanges.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout.

		FY 1986			FY 1987	
	FY 1985	Budget Request	Appropriation	Current Estimate	Budget Request	Change
Commissary Operations	74,741	82,011	83,504	82,190	83,069	+879
Retail Clothing Stores/ Ships' Stores Afloat	<u>5,667</u>	<u>5,651</u>	<u>5,651</u>	<u>5,510</u>	<u>6,195</u>	<u>+ 685</u>
Total, Retail Sales Operations	80,408	87,662	89,155	87,700	89,264	+1,564

Activity Group: Retail Sales Operations (Continued)

<u>B. Reconciliation of Increases and Decreases.</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$87,700
2. Pricing Adjustments	1,466
A. Civilian Personnel Compensation (35)	
1) Foreign National Direct Hire	
Pay Adjustment	35
B. Stock Fund (16)	
1) Non-Fuel	16
C. Foreign Currency (157)	
D. Foreign National Indirect Hire (102)	
E. Average Grade Reduction (-22)	
F. Annualization of Civilian Health Benefits (-46)	
G. Other Pricing Adjustments (1,224)	
3. Functional Program Transfers	-40
A. Transfer-Out (-40)	
1) Intra-Appropriation -40	
a) Funds to rent commercially leased space transferred to the Standard Level User Charge program for reimbursement to the General Services Administration's Federal Building Fund.	
4. Program Increases	485
A. Annualization of FY 1986 Increases (171)	
1) Civilian Substitution - Annualization of resources added in FY 1986 for the civilian substitution program.	171
B. Other Program Growth in FY 1987 (314)	
1) Seabag Tailoring - Resources will offset the cost to female members of the Navy for tailoring of government-issued uniform items. Current management fee support to tailoring of Navy L-1 (DPSC issue) items is limited to a \$1.00 credit, with the customer incurring the balance. Male members are receiving this benefit in FY 1986, at which time Navy women are the only segment of the armed forces required to pay for the tailoring of their government-issued uniforms.	314

Activity Group: Retail Sales Operations (Continued)

5. Program Decreases

-347

- A. One-time FY 1986 Costs (-104)
  - 1) Commissary Distribution System Study -  
A one-year contract in FY 1986 to  
evaluate the existing commissary merchan-  
dise distribution network. -104
- B. Other Program Decreases in FY 1987 (-243)
  - 1) Savings projected from scheduled  
efficiency reviews. -200
  - 2) Travel - Reduction due to the curtailment  
of administrative travel. -15
  - 3) L-1 Store Renovation - Reduced major  
renovations of uniform stores at  
Navy Exchanges. -28

6. FY 1987 President's Budget Request

\$89,264

III. Performance Criteria.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Average System-wide Commissary Store Hours of Operation	42.1	43.2	43.2

See Attachment A for additional performance criteria.

IV. Personnel Summary. (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>	<u>1,594</u>	<u>1,254</u>	<u>1,115</u>
Officer	81	36	40
Enlisted	1,513	1,218	1,075
B. <u>Civilian</u>	<u>2,798</u>	<u>2,864</u>	<u>2,851</u>
USDH	2,525	2,527	2,514
FNDH	183	222	222
FNIH	90	115	115

Department of Navy  
FY 1987 President's Budget  
Commissary Operations (Retail)  
(Dollars in Thousands)

	FY 1985			FY 1986			FY 1987		
	CONUS	Over- Seas	Total	CONUS	Over- Seas	Total	CONUS	Over- Seas	Total
<u>Number of Stores</u>									
Domestic Stores	60	3	63	60	3	63	60	3	63
Foreign Stores	-	18	18	-	18	18	-	18	18
Total	60	21	81	60	18	81	60	21	81
<u>Gross Yearly Sales (000's)</u>									
Domestic Stores	660,537	62,547	723,084	686,891	65,049	751,940	726,757	68,822	795,579
Foreign Stores	-	79,641	79,641	-	82,867	82,867	-	87,673	87,673
Total	660,537	142,188	802,725	686,891	147,916	834,807	726,757	156,495	883,252
<u>Appropriated Fund Support Operation and Maintenance (000's):</u>									
Civilian Pay - USDH	44,968	4,711	49,679	47,551	5,176	52,727	47,843	5,208	53,051
Civilian Pay - FNDH	-	1,522	1,522	-	2,042	2,042	-	2,111	2,111
Civilian Pay - FNIF	-	1,210	1,210	-	2,167	2,167	-	2,304	2,304
Non-Personnel Costs (excl. cost of transportation to overseas stores)	44	131	175	41	124	165	47	134	181
Travel	271	31	302	275	34	309	265	40	305
Other Purchased Services	13,550	8,303	21,853	15,365	9,415	24,780	15,574	9,543	25,117
Total - Commissary Operations	58,833	15,908	74,741	63,232	18,958	82,190	63,729	19,340	83,069
<u>Military Personnel</u>	30,557	7,821	38,378	28,378	7,095	35,473	23,232	5,845	29,077
<u>Subtotal Operating Costs (excluding overseas transportation costs)</u>	89,390	23,729	113,119	91,610	26,053	117,663	86,961	25,185	112,146
<u>Costs of Transportation to Overseas Stores</u>	-	14,002	14,002	-	16,670	16,670	-	14,271	14,271
<u>Total Appropriated Fund Support</u>	89,390	37,731	127,121	91,610	42,723	134,333	86,961	39,456	126,417

Attachment A  
Page 1 of 2

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End Strength	FY 1985		FY 1986		FY 1987	
	MIL	CIV	MIL	CIV	MIL	CIV
Military	1,306	-	1,254	-	1,115	-
Civilian						
USDH	-	2,525	-	2,527	-	2,514
FNDH	-	183	-	222	-	222
FNH	-	90	-	115	-	115
Total End Strength	1,306	2,798	1,254	2,864	1,115	2,851
Work Years	FY 1985		FY 1986		FY 1987	
	MIL	CIV	MIL	CIV	MIL	CIV
Military	1,412	-	1,280	-	1,184.5	-
Civilian						
USDH	-	2,382	-	2,552	-	2,575
FNDH	-	193	-	218	-	222
FNH	-	92	-	113	-	115
Total Workyears	1,412	2,667	1,280	2,883	1,184.5	2,912

Department of the Navy  
Operation & Maintenance, Navy  
Exhibit OP-05

Activity Group: Maintenance of Real Property  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Supply Systems Command

I. Description of Operations Financed.

This program provides for the maintenance, repair, and minor construction of all public works, buildings, structures, grounds, and utility systems required at the Naval Supply Systems Command's field activities. The two major elements of this program are:

- \* Maintenance and Repair of Real Property - finances scheduled, day-to-day recurring maintenance, emergency service work and specific maintenance projects needed to preserve facilities.
- \* Minor construction - finances the erection, installation or assembly of real property facilities; the addition, extension, alteration, conversion or replacement of existing real property facilities; the relocation of real property facilities; and the installation of equipment which is made part of a facility.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout.

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appro- priation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Maint & Repair of Real Property	24,966	22,323	24,118	27,209	35,102	+7,893
Minor Construction	<u>2,508</u>	<u>1,914</u>	<u>1,916</u>	<u>1,916</u>	<u>4,685</u>	<u>+2,769</u>
Total, Maintenance of Real Property	27,474	24,237	26,034	29,125	39,787	+10,662

Activity Group: Maintenance Of Real Property (Continued)

<u>B. Reconciliation of Increases and Decreases</u>	<u>Amount</u>
1. FY 1986 Current Estimate	\$29,125
2. Pricing Adjustments	1,336
A. Stock Fund	(156)
1) Non-Fuel	156
B. Industrial Fund Rates	(725)
C. Annualization of Civilian Health Benefits	(-5)
D. Other Pricing Adjustments	(460)
3. Functional Program Transfers	13,361
A. Transfers In	(13,361)
1) Intra-Appropriation	12,983
a) Major Repair Projects - Funds	
for major repair projects transferred to	
NAVSUP from the Naval Facilities	
Engineering Command (12,134).	
b) Base Exterior Architecture Projects -	
Funds for CNO directed improvements to the	
appearance of Naval bases transferred to	
NAVSUP from the Naval Facilities	
Engineering Command (849).	
2) Inter-Appropriation	378
a) R,D,T&E funds transferred to O&M,N	
to support the Navy Clothing and Textile	
Research Facility's base operations (20).	
b) Establishment of NSC Pensacola - Transfer	
of Base Operating Support to the supply	
department of NAS Pensacola from CNET to	
establish NSC Pensacola (358).	
4. Program Increases	-
5. Program Decreases	-4,035
A. Other Program Decreases in FY 1987	(-4,035)
1) Savings attributable to more efficient	
and economical execution of workload	
experienced, resulting from waiver of	
statutory end strength ceiling in FY 1985.	-172
2) Reduction in special maintenance	
projects.	-3,863
6. FY 1987 President's Budget Request	\$39,787



Activity Group: Maintenance Of Real Property (Continued)

III. Performance Criteria.

Maintenance of Real Property

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Backlog, Maint/Repair (\$000)	128,473	118,820	119,321
Total Buildings (KSF)	41,403	41,403	41,403

IV. Personnel Summary. (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>			
There are no military personnel associated with this activity group.			
B. <u>Civilian</u>	<u>241</u>	<u>250</u>	<u>250</u>
USDH	241	250	250

Department of the Navy  
Operation & Maintenance, Navy  
Exhibit OP-05

Activity Group: Other Base Operating Support  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Supply Systems Command

I. Description of Operations Financed.

This program provides the base support services and material required at field activities under the command of the Naval Supply Systems Command to allow assigned forces and tenants to perform their mission.

The major elements of this program are:

Base Communications - provides for administrative telephones, telecommunications centers, industrial security networks, and paging networks.

Utility Operations - Includes operating expenses for purchased electricity, electricity generating plants, purchased steam and hot water, heat plants, utility distribution systems, waste systems, air conditioning and refrigeration plants.

Personnel Operations - Support required for personnel-related functions to include expenses for:

-Other Personnel Support - provides for mess halls, sales activities, laundry and dry cleaning facilities.

-Morale, Welfare and Recreation - provides authorized appropriated fund support for shore-based recreation activities.

Base Operations - Mission - Support for those Base Operations functions which are required in direct support of the mission of the base. Expenses are included for the following functions:

-Retail Supply Operations - This item funds the management associated with the movement of personal property and assistance rendered to service members in their permanent change of station moves.

-Maintenance of Installation Equipment - provides for maintenance of major shore-based equipment including: service and miscellaneous craft, construction equipment (non-deployable), weapons, electronics, electronic engineering, and fleet moorings.

-Other Base Services - Includes expenses for miscellaneous base support functions (other than Public Works functions) not otherwise included in other functional categories. Typical of such expenses are those incurred by the administrative transportation activities (including motorpools) and security.

Activity Group: Other Base Operating Support (Continued)

Base Operations - Ownership - Support required at shore bases regardless of type of mission being performed which must be sustained to have a functioning base. Expenses are included for the following functions:

-Other Engineering Support - Public Works Department administration, engineering services, custodial services, refuse/garbage collection and disposal, snow removal, rental and leasing of real property, and fire protection and firefighting for Naval Supply Systems Command activities and their tenants.

-Administration - provides support related financial/resource management, civilian manpower management, and maintaining military personnel records.

-Automated Data Processing - provides analysis programming, equipment rental, operations and maintenance, contractual services and supplies.

-Hazardous Waste Material Handling - includes personnel, supplies and training associated with the identification and disposal of hazardous wastes.

-Audiovisual - provides supplies and services required for audiovisual support.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout.

			FY 1986			FY 1987	
		Budget	Appro-	Current	Budget		
	FY 1985	Request	priation	Estimate	Request	Change	
Base Communications	13,323	11,585	11,611	11,611	12,325	+714	
Utility Operations	21,544	20,898	20,871	21,053	22,405	+1,352	
Personnel Operations	918	464	465	465	485	+20	
Base Ops - Mission	25,767	23,017	23,427	23,498	24,678	+1,180	
Base Ops - Ownership	85,148	79,245	80,907	85,145	88,513	3,368	
Total, Base Operating Support	146,700	135,209	137,281	141,772	148,406	(+6,634)	

Activity Group: Other Base Operating Support (Continued)

<u>B. Reconciliation of Increases and Decreases.</u>		<u>Amount</u>
1.	FY 1986 Current Estimate	\$141,772
2.	Pricing Adjustments	3,650
A.	Stock Fund (16)	
1)	Fuel -75	
2)	Non-Fuel 91	
B.	Industrial Fund Rates (1,410)	
C.	Average Grade Reduction (-20)	
D.	Annualization of Civilian Health Benefits (-50)	
E.	Other Pricing Adjustments (2,294)	
3.	Functional Program Transfers	2,906
A.	Tranfers In (3,001)	
1)	Inter-Appropriation 731	
a)	RDT&E funds transferred to O&M,N by CNO to support the Navy Clothing and Textile Research Facility base operating support.	
2)	Intra-Appropriation 2,270	
a)	Transfer of accounting function from Naval Security Station, Washington to NRFC Washington (105).	
b)	Transfer of accounting function from Navy Hospital, Long Beach to NSC San Diego (76).	
c)	Transfer of accounting function from Navy Hospital, Bremerton to NSC Puget Sound (23).	
d)	Transfer of accounting function from Navy Hospital, Camp Pendleton to NSC San Diego (208).	
e)	Transfer of accounting function from NAS Alameda to NSC Oakland (36).	
f)	Transfer of accounting function from Navy Hospital Camp Lejeune to NSC Charleston (64).	
g)	Transfer of accounting function from United States Naval Academy to NRFC Washington (36).	
h)	Transfer of accounting function from Naval Medical Command (Mid Atlantic Region) to NSC Norfolk (577).	

Activity Group: Other Base Operating Support (Continued)

- i) Transfer of accounting function from Naval Medical Command (Northwest Region) to NSC Oakland (90).
- j) Transfer of base operating support functions from Naval Air Station, Pensacola (CNET) to Naval Supply Center, Pensacola (NAVSUP) (1,055).

B. Transfers Out (-95)  
1) Intra-Appropriation -95  
a) Fleet Repairables Assistance Agents from Naval Supply Center, Oakland to Commander, U.S. Pacific Fleet.

4. Program Increases

665

A. Other Program Growth in FY 1987 (665)  
1) Navy Integrated Storage, Tracking and Retrieval System (NISTARS) - Increased utility costs due to full year operation of NISTARS at Naval Supply Centers Norfolk and San Diego. 16  
3) Maintenance of Service Craft - Increased maintenance and overhaul of World War II vintage service craft is required in order to comply with OPNAVINST 4780.6 which requires overhaul and maintenance on an established frequency. 60  
4) Increased Security - Resources are required to increase the level of security afforded NAVSUP field activities. Funds will provide for the expansion of roving patrols in and around warehouses and fuel facilities. 191  
5) Fire Protection - The age of the buildings, both warehouse and administrative spaces, at NAVSUP activities makes them particularly susceptible to fire. Resources will be used to increase the number of fire-fighters on duty at any given time. 248  
6) Funding is required for costs due to increased communications between field activities, customers, and contractors due to project BOSS and price fighter initiatives. 150

Activity Group: Other Base Operating Support (Continued)

5. Program Decreases		-587
A. Other Program Decreases in FY 1987	(-587)	
1) Savings projected from scheduled efficiency reviews.	-330	
2) Savings attributable to more efficient and economical execution of workload experienced, resulting from waiver of statutory end strength ceiling in FY 1985.	-249	
3) Travel - Reduced requirements due to the curtailment of administrative travel.	-8	
6. FY 1987 President's Budget Request		\$148,406

Activity Group: Other Base Operating Support (Continued)

III. <u>Performance Criteria.</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
<u>Operation of Utilities (\$000)</u>	21,544	21,053	22,405
Total Energy Consumed (MBTUs)	2,257,279	2,984,297	3,053,085
Total Non-Energy Consumed (K Gals)	961,219	961,219	961,219
<u>Base Communications (\$000)</u>	13,323	11,611	12,325
Number of Instruments	21,228	21,228	21,228
Number of Mainlines	14,453	14,453	14,453
Daily Average Message Traffic	6,857	6,857	6,857
<u>Personnel Operations (\$000)</u>	918	465	485
Other Personnel Support (\$000)	876	270	278
Population Served, Total	3,900	3,900	3,900
(Military, E/S)	1,300	1,300	1,300
(Civilian, E/S)	3,600	3,600	3,600
Morale, Welfare & Recreation (\$000)	42	195	207
<u>Base Operations--Mission (\$000)</u>	25,767	23,498	24,678
Retail Supply Operations (\$000)	6,031	6,428	6,510
Line Items Carried (000)	2,328	2,328	2,328
Receipts (000)	4,249	4,249	4,249
Issues (000)	5,467	5,467	5,467
Maintenance of Instal. Equip. (\$000)	2,680	2,423	2,551
Other Base Services (\$000)	17,056	14,647	15,617
No. of Motor Vehicles, Total	1,556	1,556	1,556
(Owned)	1,108	1,108	1,108
(Leased)	448	448	448

IV. Personnel Summary. (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>	<u>4</u>	<u>4</u>	<u>4</u>
Officer	4	4	4
B. <u>Civilian</u>	<u>2,852</u>	<u>2,750</u>	<u>2,774</u>
USDH	2,852	2,750	2,774

Department of the Navy  
Operations & Maintenance, Navy  
Exhibit OP-5

Activity Group: Command and Administration  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Facilities Engineering Command

I. Description of Operations Financed.

These funds provide for salaries and related support cost of the engineers, technicians and administrative personnel in the Headquarters of the Naval Facilities Engineering Command (except for the execution of Military Construction), whose mission includes facilities and base planning; administration of Navy real estate; engineering and management support for acquisition of facilities, utilities systems, and civil engineering support equipment; management of Navy family housing; administration of the Navy Environmental Protection Program; support of ocean engineering; technical support of the Naval Construction Force and other fleet units; public works support for major naval complexes executed by the Public Works Centers; and research and development related to all of the above. The personnel provide for the command and control of the field activities of the Command, as well as the programming, budgeting and financial management support for those appropriations for which the Command is responsible.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1986</u>	<u>FY 1986</u>	<u>FY 1987</u>	<u>Change</u>
		<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	
Command Administration	18,138	17,663	18,294	17,954	16,652	-1,302



Activity Group: Command and Administration (cont'd)

<u>B. Reconciliation of Increases and Decreases.</u>		<u>Amount</u>
1. FY 1986 Current Estimate		\$17,954
2. Pricing Adjustments		30
A. Annualization of Civilian Health Benefits Reduction	(-6)	
B. Average Grade Reduction	(-59)	
C. Other Pricing Adjustments	(95)	
3. Functional Transfers		-537
A. Transfers Out	(-537)	
1) Inter-appropriation: Transfer of associated end strength, salaries and support costs of the Defense Medical Facilities Office to O&M,DA	-400	
2) Intra-appropriation: Transfer of Special Repair Program administration to Naval Air Systems Command, Budget Activity 7, Command and Administration.	-137	
4. Program Increases		11
A. Other Program Increases in FY 1987	(11)	
1) Civilian Substitution for Military Personnel	11	
5. Program Decreases		-806
A. Annualization of FY 1986 Decreases	(-231)	
1) Reduction associated with DON initiatives to streamline organizational and program management structure implemented in FY 1986.	-231	
B. Other Program Decreases in FY 1987	(-575)	
1) Reductions associated with DON initiatives to streamline the organizational and program management structure of the Naval Headquarters Establishment	-354	
2) Decrease associated with savings of lease costs resulting from "buyout" of word processing equipment.	-221	
6. FY 1987 President's Budget Request		\$16,652

Activity Group: Command and Administration (cont'd)

III. <u>Performance Criteria.</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Number of field activities provided management services	21	21	21
Total civilians supported	22,091	21,145	21,255
Total military supported	1,182	1,223	1,231
Total funds (from all sources - \$in billions)	5.6	6.2	6.6

IV. Personnel Summary.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military E/S</u>	<u>53</u>	<u>52</u>	<u>51</u>
Officer	44	44	44
Enlisted	9	8	7
B. <u>Civilian E/S</u>	<u>349</u>	<u>341</u>	<u>342</u>
USDH	349	341	342

Department of the Navy  
Operations & Maintenance, Navy  
Exhibit OP-5

Activity Group: Field Operations  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Facilities Engineering Command

I. Description of Operations Financed.

Field Operations include the personnel and related support costs for the Engineering Field Divisions (except for the execution of Military Construction) the Naval Energy and Environmental Support Activity and the Environmental Restoration Programs. The Engineering Field Divisions are responsible for providing support to the operating forces of the Navy, the Marine Corps, and other naval commands in regard to shore facilities and related material and equipment, including the planning, design and construction of public works, public utilities, and special facilities for the Navy (e.g., communications facilities, runways, piers, hospitals, personnel support facilities); acquiring and disposing of Navy real estate; providing technical advice and assistance on the maintenance of facilities and operations of utilities; directing and administering family housing at assigned field installations and providing technical and engineering advice and assistance; administering the assignment, replacement, maintenance and disposal of transportation equipment (passenger vehicles, trucks, trailers, construction, firefighting and weight handling equipment); assisting and advising activities in the application of the technical programs assigned to the Naval Facilities Engineering Command; and providing facilities engineering assistance to those naval commands for which Engineering Field Divisions have been designated the principal staff advisor.

The Naval Energy and Environmental Support Activity is responsible for providing environmental protection and energy conservation support to naval commands. Its mission is to support: (1) the Naval Environmental Protection Support Service (NEPSS), which provides: Navy-wide environmental data management with an ADP capability, specialized air emission test teams, wastewater and potable water experts, a hazardous material/waste management and investigation team; and ship sewage and oily waste disposal experts; (2) energy conservation management; energy training; and (3) technical assistance and engineering management of procurement, overhaul and utilization of Mobile Utility Support Equipment (MUSE).

The Environmental Restoration Program represents an ongoing but newly reorganized environmental rehabilitation effort, designed to enhance the priority status and visibility of the program. FY1984 - 1986 work includes hazardous waste site clean-up; other non-disposal hazardous waste operations; and unsightly building demolition.

## I. Description of Operations Financed. (cont'd)

That work is being executed through a DOD transfer appropriation (ERDA). Beginning in FY 1987 only hazardous waste disposal itself will be budgeted and executed through O&M,N. Disposal will be the responsibility of the Defense Logistics Agency (DLA) until FY 1987. A detailed description of the FY 1984 - 1986 program follows:

1. Installation Restoration Program. This is a comprehensive, multi-phase program to identify, investigate, confirm, and clean up contamination from hazardous substances and wastes on active installations. Specific projects include Initial Assessment Studies (IAS), Confirmation Studies (CS), groundwater monitoring projects and remedial measures.
2. Building Demolition and Debris Removal Program. The purpose is to plan and execute a comprehensive program to demolish and remove unsafe, unsightly, and hazardous buildings and structures on active Navy and Marine Corps installations.
3. Other Hazardous Waste Operations. These include studies and the purchase of hardware to reduce hazardous waste generation, as well as one-time waste permit costs required under the Resource Conservation and Recovery Act. This does not involve disposal itself which begins in FY 1987.

## II. Financial Summary (Dollars in Thousands).

### A. Sub-Activity Group Breakout.

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appro- priation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Engineering Field Divisions	54,397	51,183	52,789	53,277	58,351	+5,074
Navy Energy/Environ Spt Act	3,633	3,397	3,484	3,639	3,641	+2
Environmental Restoration	(24,301)*	42,906	-	46,348	22,720	-23,628
Total Field Operations	58,030	97,486	56,273	103,264	84,712	-18,552

\* FY 1985: Environmental Restoration, Defense Appropriation (ERDA)

Activity Group: Field Operations (cont'd)

B. <u>Reconciliation of Increases and Decreases.</u>	AMOUNT
1. FY 1986 Current Estimate	103,264
2. Pricing Adjustments	2,310
A. Industrial Fund Rates	(35)
B. Annualization of Civilian Health Benefits Reduction	(-16)
C. Average Grade Reduction	(-146)
D. Other Pricing Adjustments	(2,437)
3. Functional Transfers	-24,962
A. Transfers-In	(22,720)
1) From O&MDA, Defense Logistics Agency for Hazardous Waste Disposal Operations as directed by Congress.	22,720
B. Transfers-out	(-47,682)
1) Inter-appropriation Transfer of Environmental Restoration funding to O&MDA.	-47,375
2) a) Intra-appropriation transfer of Civilian Personnel Administration to CCPO Norfolk, Budget Activity 7, Naval Air Systems Command, Field Operations.	-187
b) Transfer of SLUC reimbursable charges to Budget Activity 9, CNO, Base Operations.	-120
4. Program Increases	5,246
A. Annualization of FY 1986 Increases	(210)
1) Increase in Field Support Operations associated with DON initiatives to streamline the organizational and program management structure of the Naval Headquarters establishment	210
B. Other Program Increases in FY 1987	(5,036)
1) Increase provided for updating of facility requirements and activity Master Plans to ensure shore support is adequate to serve expanded fleet needs especially in the Gulf area, San Francisco and Pearl Harbor.	500

Activity Group: Field Operations (cont'd)

B. <u>Reconciliation of Increases and Decreases.</u>	<u>AMOUNT</u>
2) Increase required to identify energy conservation opportunities at shore activities through the Energy Engineering Program (EEP) which will generate savings and provide cost avoidance to Navy in future years. This effort directly supports OSD energy goals. Based on past experience, \$3.3 million of EEP studies will identify conservation opportunities which will generate approximately \$20 million in cost avoidance annually when fully operational.	4,536
5. Program Decreases	-1,146
A. Other Program Decreases in FY 1987	(- 1,146)
1) Realignment to the Naval Security and Investigative Command of the responsibility to adjudicate personnel security clearances.	-48
2) Savings projected to result from scheduled efficiency reviews at EFD's	-611
3) Savings associated with conversion to contractor performance or in-house efficiencies resulting from CA studies under OMB circular A-76.	-338
4) Savings attributable to more efficient and economical execution of workload experienced resulting from waiver of statutory end strength ceilings in FY 1985.	-149
6. FY 1987 President's Budget Request	\$84,712

Activity Group: Field Operations (cont'd)

III. <u>Performance Criteria. (\$000)</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
<u>Engineering Field Divisions (EFDs)</u>			
1. Facilities and Base Planning: Master planning and special studies related to facilities base requirements and utilizations.	11,052	11,501	12,072
2. Administration of Navy Real Estate: Effort related to acquisition, disposal and leasing of real estate.	3,639	3,675	3,683
3. Utilities, Transportation and Other Facilities: Engineering and management support to major claimants in relation to all Naval Shore Facilities. Review audits and validate requirements for Civil Engineering Support and Weight handling Equipment.	26,531	26,405	27,221
4. Management of Family Housing: Oversees the complete planning management of Navy Family Housing.	2,230	2,253	2,258
5. Administration of Navy Environmental Protection Program: Validate, develop and implement projects to correct pollution problems.	2,119	2,141	2,047
6. Energy Engineering: This program provides the resources required to improve the energy efficiency of the shore establishment. Execution of the program is primarily through contractual effort.	8,826	7,302	11,070
(EFDs Total)	(54,397)	(53,277)	(58,351)
<u>Navy Energy/Environmental Support Activity (NEESA)</u>			
1. Energy Engineering: This program provides the resources required to improve the energy efficiency of the shore establishment. Execution of the program is primarily through contractual effort.	1,013	928	928

Activity Group: Field Operations (cont'd)

III. <u>Performance Criteria. (\$000) (cont'd)</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
2. Pollution Abatement: Performance of air emission testing and hazardous waste investigations. Central management of the environmental data system and dissemination of technical and managerial guidance.	2,187	2,263	2,265
3. Mobile Utility Support Equipment: Provides for the assignment, inspection, procurement and other technical management of MUSE.	433	448	448
(NEESA Total)	(3,633)	(3,639)	(3,641)
Environmental Restoration Program:	(24,301)*	46,348	22,720
Facilitates centralized execution of Navy efforts in the area of environmental protection.			
Field Operations Total	\$58,030	103,264	84,712

\* Environmental Restoration Program was executed under the Environmental Restoration, Defense appropriation in FY 1985.



Activity Group: Field Operations (cont'd)

IV. Personnel Summary.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military E/S</u>	<u>129</u>	<u>167</u>	<u>170</u>
Officer	84	124	126
Enlisted	45	43	44
 B. <u>Civilian E/S</u>	 <u>1,122</u>	 <u>1,265</u>	 <u>1,237</u>
USDH	1,122	1,265	1,237

Department of the Navy  
Operations & Maintenance, Navy  
Exhibit OP-5

Activity Group: Logistics Support Services  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Facilities Engineering Command

I. Description of Operations Financed.

Funding supports shore facilities and fleet support programs which are the responsibility of the Naval Facilities Engineering Command and include: (a) Collateral Equipment Program which provides centralized funding for collateral equipment required to initially outfit new military construction at naval activities throughout the shore establishment; (b) Engineering Investigations Program which provides engineering investigations, feasibility studies and surveys for more than 700 naval activities; (c) Inspection of Radio Towers Program provides direct support to the fleet through structural inspection of radio towers; (d) Soil Conservation and Natural Resources Program provides technical assistance to improve erosion control and conservation; (e) Planning Studies Program provides architectural and engineering services and studies, computer support, mapping support and specialized industrial support studies; (f) Pollution Abatement Program identifies pollution abatement deficiencies, develops technical solutions and provides technical assistance to all Navy field activities to comply with various public laws; (g) Federal Military Standards and Specifications Program provides for development, review, conversion, consultation and publications of federal and military specifications; (h) Fleet Moorings Program provides for the installation, relocation, inspection, maintenance and repair of moorings; (i) the Ocean Facilities Program provides for the maintenance, repair and overhaul of specialized ocean construction equipment; and (j) Materials technology, which consists of (1) Base Engineering Support Technical (BEST) Program which provides software development and training for a management information system for all larger Naval Public Works Departments to improve workload scheduling, personnel utilization, and cost estimating; (2) Chemical, Biological, and Radiological (CBR) Warfare Protection Program which provides protective masks, suits, and meters to counter the effects of CBR warfare; (3) non-2C equipment used by the Naval Construction Force; (4) base operating technical support and analysis for all Navy claimants; and (5) administrative, public works shop, and specialized inspection equipment for the Naval Facilities Engineering Command and its field activities.

Activity Group: Logistics Support Services (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

			FY 1986		FY 1987	
	FY 1985	Budget Request	Appropriation	Current Estimate	Budget Request	Change
Collateral Equipment	36,922	47,240	29,782	30,782	40,470	+9,688
Engr Investigations	4,046	6,156	6,156	6,071	5,955	-116
Radio Towers	130	324	324	324	336	+12
Soil Conservation and Natural Resources	419	469	469	469	488	+19
Planning Studies	5,044	4,013	3,993	4,993	5,572	+579
Pollution Abatement	8,412	13,634	13,596	13,556	13,661	+105
Federal Standards & Specifications	1,683	2,066	2,066	2,066	2,151	+85
Fleet Moorings	941	4,716	4,716	4,656	5,502	+846
Ocean Facilities	1,499	2,091	844	844	1,079	+235
Materials Technology	3,521	19,586	14,788	14,788	12,619	-2,169
Total, Logistics Support Services	62,617	100,295	76,734	78,549	87,833	+9,284

Activity Group: Logistics Support Services (cont'd)

B. Reconciliation of Increases and Decreases.

AMOUNT

1. FY 1986 Current Estimate		\$78,549
2. Pricing Adjustments		3,197
A. Stock Fund	(411)	
1) Non-Fuel	411	
B. Industrial Fund Rates	205	
C. Other Pricing Adjustments	2,581	
3. Program Increases		11,031
A. Other Program Increases in FY 1987	(11,031)	
1) Increase is in support of Facilities Planning in Encroachment Studies to mitigate and to forecast problems concerning community encroachment, traffic problems electro-magnetic interference and requests for operations curtailment	379	
2) Increase for the upgrade of seven additional major fleet moorings to reduce safety hazards, increase chain sizes, holding capacities and life expectancies.	629	
3) Increase supports the initial acquisition of seawater hydraulic tool kits as well as an increase in equipment procurement for the Ocean Construction Equipment inventory to fulfill fleet needs for inspection, and maintenance and repair of high value ocean and underwater facilities.	195	
4) Increased procurement of collateral equipment to accommodate substantially increased need for furniture, furnishings, and non-technical equipment for first positioning (initial outfitting) in new Military Construction, Navy facilities by the construction beneficial occupancy dates.	8,457	
5) Increase in pollution abatement hazardous solid waste projects to reduce the volume of hazardous waste at Naval Shipyards and Air Rework Facilities through recycling/pre-treatment and Thermal Destruction Techniques.	1,371	

Activity Group: Logistics Support Services (cont'd)

4. Program Decreases		-4,944
A. Other Program Decreases in FY 1987	(-4,944)	
1) Decrease of chemical, biological, radiological (CBR) outfitting of overseas bases.	-2,454	
2) Decrease attributable to the Base Engineering Support Technical (BEST) Production Management System moving from the installation to the implementation phase at the Navy Public Works Offices. (Not PWC's)	-304	
3) Decrease in water pollution abatement projects to facilitate increased work to reduce solid wastes from aircraft paint stripping and to develop hazardous sludge management technology.	-1,759	
4) Decreased effort in Engineering Investigations Program	-427	
5. FY 1987 President's Budget Request		\$87,833

III. Performance Criteria

Collateral Equipment

The FY 1987 budget includes resources for initial outfitting of Congressionally authorized Military Construction, Navy (MCON) projects and the Government of Japan (GOJ) Relocation and Facilities Improvement Programs, with construction usable completion dates (UCD's) as follows:

Overseas: September 1987  
CONUS: October 1987

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Initial Outfitting-MCON	\$32,885	\$25,875	\$40,343
Initial Outfitting-GOJ	4,015	4,907	127
CNM Augmentation Program	22	0	0
TOTAL Dollars (\$000)	\$36,922	\$30,782	\$40,470

Engineering Investigations

The Engineering Investigations (E.I.) Program provides immediate access to the private sector and laboratories via contract and is a key element in the Naval Facilities Engineering Command's ability to quickly mobilize the skills, talents, and knowledge required to resolve facilities problems in four important areas: seismic, engineering design criteria, long-term ongoing projects, and unpredictable critical requirements from more than 700 Naval activities.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Dollars (\$000)	\$4,046	\$6,071	\$5,955
No.	46	53	50

III. Performance Criteria

Inspection of Radio Towers

Radio tower inspections are performed by professional contractual personnel and provide early detection of potential problem areas, prevent possible structural tower failures, and identify maintenance deficiencies early on that may save extensive rehabilitation costs.

The present scope includes examination of individual elements, rate of deterioration, effect of damage, necessity for repair, tower verticality and rod alignment. Additionally, the following requirements are included in all contracts:

- a. Inspect all counterweight subsystems
- b. Inspect all top hat subsystems
- c. Inspect all feed line subsystem
- d. Inspect all cables in running rigging subsystems
- e. Inspect a random sampling of bolts for corrosion

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Dollars (\$000)	\$130	\$324	\$336
Towers Inspected	77	123	84

The frequency of radio tower inspections vary due to several reasons. Namely, certain activities inspect their towers on a two year frequency and others on a four year frequency. In FY 1987 there is a preponderance of 1200-1500 foot towers which are fewer in number but more costly per unit while in FY 1986 there was a preponderance of 100-300 foot towers spread throughout the pacific.

Soil Conservation and Natural Resources

This program consists of projects and studies for soil conservation, and natural resources management that vary in scope from individual installations surveys of \$4 thousand to a Navy-wide project of \$50 thousand. The fewer number of projects to be undertaken in FY 1987 are greater in scope than the program studies prepared in FY 1986.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Dollars (\$000)	\$419	\$469	\$488
Numbers of Projects	27	33	24

Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria (cont'd)

Planning Studies

This program provides for the support of computerized planning systems; Architectural and Engineering (A&E) contractual mapping and planning studies; and facility planning requirements at Naval Base complexes. The chart below indicates funding levels required for each aspect of the program.

	FY 1985		FY 1986		FY 1987	
	No.	\$	No.	\$	No.	\$
A&E Facility Planning Studies	1	\$ 29	1	\$ 18	1	\$ 24
A&E Encroachment Studies	4	625	4	550	8	1,100
A&E Planning Studies	21	3,814	18	3,736	39	3,759
ADP Support	N/A	576	N/A	689	N/A	689
TOTAL Dollars (\$000)	26	\$5,044	23	\$4,993	48	\$5,572

Funds are used to provide intermediate products as well as final products. For instance, A&E Planning Studies buy activity and complex master plans. Noise studies which are used in writing Air Installation Compatible Use Zone Chapters (AICUZ) for master plans are paid for from these funds. Studies vary significantly in scope and the length of time required for accomplishment. For instance, the POL Study for DOD activities in Japan has taken over 4 years to complete and has been accomplished using funds from 3 fiscal years with a total cost of \$647,591. Traffic studies cost only \$2,000 to \$3,000 each.

Pollution Abatement

Projects are developed based upon the need to correct deficiencies to meet standards established under various public laws. The following schedule shows the funding plan by type of operation:

	FY 1985		FY 1986		FY 1987	
	# OF PROJS	COST (\$000)	# OF PROJS	COST (\$000)	# OF PROJS	COST (\$000)
Air	2	\$ 875	5	\$ 1,139	5	\$ 1,104
Water	61	5,612	134	9,549	76	7,790
Noise	-	158	-	170	-	183
Solid Waste	2	1,700	6	2,320	35	4,089
Pesticides	-	67	7	378	8	495
TOTAL Dollars (\$000)	65	\$8,412	152	\$13,556	124	\$13,661

Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria (cont'd)

Federal Military Standards and Specifications

This workload is developed from procurement contract requirements, and various specifications and standards that require initial development, revision, and review.

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	<u>No.</u>	<u>(\$000)</u>	<u>No.</u>	<u>(\$000)</u>	<u>No.</u>	<u>(\$000)</u>
Develop/Revise standard- ization Documents.	100	\$ 35	110	\$ 45	110	\$ 47
Provide NAVFAC Requirements on Approximately 12,000 Defense Standardization Specification Program (DSSP) documents prepared by others. NAVFAC DSSP Actions as Required.	2,500	1,087	2,500	1,313	2,500	1,368
Cancel Standardization documents.	20	50	20	52	20	54
Adopt/Readopt Non-Government Standards in NAVFAC Inven- tory (approximately 800).	200	380	250	520	250	541
Prepare Program Analysis and Plan.	4	80	4	83	4	86
Provide EFD on-site update, guidance and assistance on data management.	4	<u>51</u>	4	<u>53</u>	4	<u>55</u>
Total Dollars (\$000)		\$1,683		\$2,066		\$2,151



Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria (cont'd)

Fleet Moorings

Within the expanded Navy concept, it is projected that a 25% increase in the number of moorings will be required to support the fleet. Changes in ship design will necessitate mooring replacements to increase chain size and holdings capacities. Also, approximately 80% of the existing assets either need partial restoration or require total replacement. Accordingly, the funds will be used for restoring and upgrading moorings, and for conducting underwater inspections.

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	<u>No.</u>	<u>(\$000)</u>	<u>No.</u>	<u>(\$000)</u>	<u>No.</u>	<u>(\$000)</u>
Overhauls/Repairs	5	\$518	20	\$2,034	20	\$1,946
Upgrades (new chain, cathodic protection, fiberglass)	-	-	17	1,872	24	2,806
Cyclical Inspection	100	136	125	350	125	350
Installation of Moorings	4	<u>287</u>	3	<u>400</u>	3	<u>400</u>
TOTAL dollars (\$000)		\$941		\$4,656		\$5,502

Ocean Facilities

This program provides for overhaul, maintenance, and repair of the ocean construction equipment which provides the underwater construction teams of the Naval Construction Force with the capability to respond to and fulfill both exigent and planned fleet needs for construction, inspection, maintenance and repair of high value ocean and underwater facilities.

	<u>FY 1985</u> <u>(\$000)</u>	<u>FY 1986</u> <u>(\$000)</u>	<u>FY 1987</u> <u>(\$000)</u>
Maintenance and overhaul of the Ocean Construction Equipment Inventory	\$1,378	\$ 606	\$ 606
Replacement of facilities components	35	70	70
Facilities support and maintenance	68	109	109
New equipment	18	59	94
Initial Acquisition of Hydraulic Tools	0	0	200
TOTAL	<u>\$1,499</u>	<u>\$ 844</u>	<u>\$1,079</u>

70368

Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria (cont'd)

Materials Technology

Includes: Base Engineering Support, Technical (BEST) which provides for contract costs of software maintenance, installation, and training of public works department employees to improve workload scheduling, personnel utilization and cost estimating for all Navy facilities; Chemical, Biological, Radiological (CBR) warfare program which is part of the initiative by the Navy to equip Naval Construction Force (NCF) and overseas base personnel with protective clothing, detectors, decontamination equipment and protective structures to counter the effects of chemical warfare; Non-2C copy equipment for the Naval Construction Force; Base operating technical support and analysis for all Navy claimants; administrative equipment, Public works shops equipment and specialized inspection equipment for the Naval Facilities Engineering Command and its field activities.

	<u>FY 1985</u> <u>(\$000)</u>	<u>FY 1986</u> <u>(\$000)</u>	<u>FY 1987</u> <u>(\$000)</u>
BEST			
Software Development	\$ 205	\$ -	\$ -
Software Maintenance & Installation	<u>1,192</u>	<u>690</u>	<u>414</u>
(sub total-BEST)	(1,397)	(690)	(414)
CBR			
Protective masks	-	7,500	6,000
Protective clothing (overgarments, gloves, hoods, etc.)	57	5,091	4,045
Decontamination materials and equipment	400	158	500
Detectors, alarms, training aids, etc.	<u>44</u>	<u>50</u>	<u>500</u>
(Subtotal CBR)	(501)	(12,799)	(11,045)

Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria (cont'd)

Material Technology (cont'd)

	<u>FY 1985</u> <u>(\$000)</u>	<u>FY 1986</u> <u>(\$000)</u>	<u>FY 1987</u> <u>(\$000)</u>
Other:			
Naval Construction Force Equipment	744	452	564
BOS Tech Support and Analysis	504	367	440
Defense Relocation	375	-	-
Administrative Equipment	-	211	17
Public Works Shop Equipment	-	181	98
Specialized inspection equipment	<u>-</u>	<u>88</u>	<u>41</u>
(Subtotal Other)	(1,623)	(1,299)	(1,160)
TOTAL dollars (\$000)	\$3,521	\$14,788	\$12,619

IV. Personnel Summary.

No personnel associated with this activity group.

Department of the Navy  
Operations & Maintenance, Navy  
Exhibit OP-5

Activity Group: Maintenance of Real Property  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Facilities Engineering Command

I. Description of Operations Financed.

Maintenance of Real Property supports repair of and minor construction additions to naval facilities which are critical to preservation of fleet support activities. Funding in this activity group reflects Navy efforts to reduce the backlog of maintenance and repair at naval facilities in accordance with the Congressional direction. The sub-activities included under the Real Property Maintenance group are described below:

A. Maintenance/Repair

1. Facilities Maintenance finances routinely scheduled maintenance and emergency repairs for NAVFAC field activities.
2. Major Repair - finances more substantial maintenance projects over \$75K which are required to bring existing facilities into adequate condition to permit activities to fulfill their assigned mission. Also included is the cost of the administration and contract execution of the entire Navy/Marine Corps Operations and Maintenance Repair Projects program by the Engineering Field Divisions; and the cost of projects specifically designed to correct facility deficiencies relating to the Navy's Occupational Safety and Health Program.

- B. Minor Construction - finances projects under \$200K for alterations to facilities, extensions of utility systems, additions to existing facilities, replacement of damaged or deteriorated facilities. In addition, the installation of equipment which is made part of a facility to permit activities to accomplish their assigned mission is also financed in this sub-activity group. Also funds minor construction relating to the Navy's Occupational Safety and Health Program and routine minor construction projects for NAVFAC field activities.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1985	FY 1986 Budget Request	FY 1986 Appropri- ation	FY 1986 Current Estimate	FY 1987 Budget Request	Change
Facilities Maintenance	30,352	22,160	21,971	20,028	25,986	+5,958
Major Repair	84,553	77,033	90,613	94,916	63,832	-31,084
Minor Construction	<u>13,062</u>	<u>10,791</u>	<u>10,773</u>	<u>9,573</u>	<u>9,566</u>	<u>-7</u>
Total, Maintenance of Real Property	127,967	109,984	123,357	124,517	99,384	-25,133

Activity Group: Maintenance of Real Property (cont'd)

<u>B. Reconciliation of Increases and Decreases.</u>		<u>AMOUNT</u>
1. FY 1986 Current Estimate		\$124,517
2. Pricing Adjustments		5,527
Stock Fund	(32)	
1) Non-Fuel	32	
B. Industrial Fund Rates	1,415	
C. FN Indirect	104	
D. Annualization of Civilian Health Benefits Reduction	-23	
E. Foreign Currency Rates	1,410	
F. Other Pricing	2,589	
3. Functional Transfers		-19,321
A. Transfers Out	(-19,321)	
1) Intra-Appropriation:		
Transfer of non-NAVFAC major repair/minor construction projects to NAVSUP (\$12,983) and NAVSEA (\$6,338).	-19,321	
4. Program Increases		3,656
A. Other Program Increases in FY 1987	(3,656)	
1) Increased base facilities maintenance effort at field activities to reduce the growing backlog.	3,656	
5. Program Decreases		-14,995
A. Other Program Decreases in FY 1987	(-14,995)	
1) Reduction in major repair/minor construction projects.	-14,584	
2) Savings attributable to more efficient and economical execution of workload experienced resulting from waiver of statutory end strength ceilings in FY 1985.	-411	
6. FY 1987 President's Budget Request		\$99,384

NAVIAC

Activity Group: Maintenance of Real Property

III. Performance Criteria and Evaluation      FY 1985      FY 1986      FY 1987

Maintenance of Real Property

Backlog, Maint/Repair (\$000)	33,184	30,695	30,825
Total Buildings (KSF)	11,404	11,404	11,404

IV. Personnel Summary

A. Military Personnel      FY 1985      FY 1986      FY 1987

Officer	11	10	10
Enlisted	54	51	51

B. Civilian Personnel

USDH	1,433	1,391	1,545
FNIH	131	137	137

Department of the Navy  
Operations & Maintenance, Navy  
Exhibit OP-5

Activity Group: Other Base Operations  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Naval Facilities Engineering Command

I. Description of Operations Financed.

The Other Base Operations Program involves support of fourteen functions (sub-activities) related to operation of various field activities which are under Naval Facilities Engineering Command (NAVFAC) direction. There are also included a number of centrally managed Navy world-wide programs. The sub-activities included under the Other Base Operations program are described below:

A. Utility Operations. Included are costs of purchased utilities and also utility system generation/distribution costs where applicable at all field activities under NAVFAC direction. The Mobile Utility Support Equipment (MUSE) Overhaul Program finances the repair of portable steam plants, electric substation, and power generators. The Coal and Water Analysis Program supports quality testing of coal burned at naval facilities and water treatment testing for boilers.

B. Personnel Operations.

1. Bachelor Housing. Provides support for the operation of barracks, personnel housing, BOQs, BEQs and the purchase and maintenance of personnel support equipment related to the housing of personnel.

2. Other Personnel Support. Provides for food service facilities (mess halls, galleys), sales activities, laundry and dry cleaning facilities and initial procurement, repair, and replacement of furniture and furnishings.

3. Morale, Welfare and Recreation. Provides appropriated fund support for shore based recreation activities, special services, personnel support equipment, libraries, clubs and military and civilian dependents general recreation as authorized.

C. Base Operations - Mission.

1. Retail Supply Operations. This function involves storage of Seabee support material inventories prior to issuance worldwide, as well as procurement and other activities common to an organic supply department.

2. Maintenance of Installation Equipment. Included in this sub-activity group is maintenance of plant equipment at Construction Battalion Centers. Overhaul of NAVFAC-owned service craft such as working tugs employed at coastal facilities is also funded here.

Activity Group: Other Base Operations (cont'd)

3. Other Base Services. The costs budgeted here are for base transportation and associated vehicle/craft operation and routine maintenance. Also included is the centrally managed program for Civil Engineering Equipment Overhaul which covers periodic rehabilitation of heavy engineering equipment used world-wide. Operation of Family Service Centers at major NAVFAC field activities is also covered here.

4. Physical Security. Provides for lock security specifications and physical security program management at the Engineering Field Divisions.

D. Base Operations - Ownership.

1. Engineering Support. This area includes public works administration, custodial services, garbage collection, facility inspection, and firefighting services performed at NAVFAC activities.

2. Administration. Funding covers costs of financial management operations, as well as personnel and training offices, at Construction Battalion Centers and the Naval Support Facility.

3. Automated Data Processing. This sub-activity group is composed of the management support costs of in-house computer programming, as well as equipment rental and other contractual ADP purchases.

4. Hazardous Waste Operations. Provides for major asbestos removal projects.

5. Audiovisual Services. Provides supplies and services required for audiovisual support.

E. Base Communications. Base Communications represents the cost incurred by Headquarters, Naval Facilities Engineering Command, the six Engineering Field Divisions, and the three Construction Battalion Centers for telecommunications requirements. Specifically, these requirements include equipment rental; rental of leased communication lines to operate rapid communication and administrative telephones; and telephone services including toll charges.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1985	FY 1986 Budget Request	FY 1986 Appropri- ation	FY 1986 Current Estimate	FY 1987 Budget Request	Change
Utility Operations	8,847	8,593	8,621	6,766	6,898	+132
Personnel Operations	3,532	3,000	3,026	3,426	3,786	+360
Base Ops - Mission	34,094	39,789	37,405	38,082	37,986	-96
Base Ops - Ownership	25,239	35,115	31,941	32,447	41,630	+9,183
Base Communications	<u>2,623</u>	<u>1,885</u>	<u>1,885</u>	<u>1,587</u>	<u>2,201</u>	<u>+614</u>
Total, Other Base Operations	74,335	88,382	82,878	82,308	92,501	+10,193

70375



Activity Group: Other Base Operations (cont'd)

<u>B. Reconciliation of Increases and Decreases.</u>		<u>AMOUNT</u>
1. FY 1986 Current Estimate		\$82,308
2. Pricing Adjustments		4,163
A. Stock Fund	(416)	
1) Fuel	-50	
2) Non-Fuel	466	
B. Industrial Fund Rates	868	
C. FN Indirect	111	
D. Annualization of Civilian Health Benefits Reductions	-22	
E. Foreign Currency Rates	1,492	
F. Other Pricing	1,298	
3. Functional Program Transfers		-5,553
A. Transfer Out	(-5,553)	
1) Intra-Appropriation: Realignment of Sealift Support to Budget Activity 4, Airlift and Sealift.	-5,534	
2) Intra-Appropriation: Legal services position from Construction Battalion Center (CBC) Gulfport to Chief of Naval Operations (CNO) Budget Activity 9; Insurv, Legal and Administrative Activities.	-19	
4. Program Increases		12,399
A. Other Program Growth in FY 1987	(13,805)	
1) Increase is in support of Navy's emphasis on projects for Asbestos removal.	4,998	
2) Increase provides for the reduction of the Service Craft overhaul backlog by 3 units.	976	
3) Increase provides for the necessary management support of the Naval Construction Force Upgrade program.	1,330	
4) Increase provides for "ruggedized" microcomputers for Seabees' administrative field operations to improve personnel and project management through effective task automation. Hardware will permit accountability and control for material thus enhancing unit readiness.	1,112	
5) Increase covers the substitution of civilians for military billets in the personnel support areas of the Construction Battalion Centers.	88	
6) Growth associated with the non-reimbursable engineering mission performed by Public Works Centers in support of the expanding fleet (e.g., shore steam/cold iron support).	1,336	

Activity Group: Other Base Operations (cont'd)

C. <u>Reconciliation of Increases and Decreases (con't)</u>	<u>AMOUNT</u>
7) Increase for centrally managed DOD lock enhancement program to determine specifications required for physical security of facilities. This is part of the overall anti-terrorism campaign. In particular, operational evaluation of two padlock systems and specialized magazine door locks will be initiated in FY 1987 above. There will also be initiatives to develop appropriation security specifications for crash barriers; structure hardening; window glazing; ballistics; facility access control; and physical security assessment planning.	1,313
8) Increase provides for the reduction of the Civil Engineering Equipment Overhaul (CEEEO) backlog by 5 units.	645
9) Program managers to administer the new spousal employment effort for Navy personnel. Goal is to assist spouses in finding employment opportunities in new assignment locations.	50
10) Increase provides for major telephone equipment upgrade at field activities to provide significant enhancement of communications efficiency and reduced leasing costs.	551
5. Program Decreases	-816
A. Other Program Decreases in FY 1987	(-816)
1) Savings projected to result from scheduled efficiency reviews.	-183
2) Savings associated with conversion to contractor performance or in-house efficiencies resulting from CA studies under OMB circular A-76.	-307
3) Savings attributable to more efficient and economical execution of workload experienced resulting from waiver of statutory end strength ceilings in FY 1985.	-326
6. FY 1987 President's Budget Request	\$92,501

III. <u>Performance Criteria and Evaluation</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
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BASE OPERATIONS

OPERATIONS OF UTILITIES

TOTAL ENERGY CONSUMED (MBTU'S)	742,378	712,189	712,189
TOTAL NON-ENERGY CONSUMED (000 GALS)	485,828	485,828	485,828

BASE COMMUNICATIONS

NUMBER OF INSTRUMENTS	11,663	11,663	11,663
NUMBER OF MAINLINES	7,939	7,939	7,939
DAILY AVERAGE MESSAGE TRAFFIC	1,056	1,056	1,099

PERSONNEL OPERATIONS

BACHELOR HOUSING (\$000)	275	384	427
NO. OFFICER QUARTERS	86	86	86
NO. ENLISTED QUARTERS	4,359	4,359	4,359
OTHER PERSONNEL SUPPORT (\$000)	2,031	1,933	2,041
POPULATION SERVED, TOTAL	56,072	56,072	56,072
(MILITARY, E/S)	9,362	9,362	9,362
(CIVILIAN, E/S)	46,710	46,710	46,710
MORALE, WELFARE & REC (\$000)	1,226	1,109	1,318
POPULATION SERVED, TOTAL	56,860	56,860	56,860
(MILITARY, E/S)	9,660	9,660	9,660
(CIVILIAN/DEP, E/S)	47,200	47,200	47,200

BASE OPERATIONS—MISSION

RETAIL SUPPLY OPER (\$000)	16,870	15,203	16,866
LINE ITEMS CARRIED (000)	93	93	100
RECEIPTS (000)	86	86	100
ISSUES (000)	365	365	450
MAINT OF INSTAL EQUIP (\$000)	11,192	13,565	9,434
OTHER BASE SERVICES (\$000)	6,032	9,286	10,344
NO. OF MOTOR VEHICLES, TOTAL	982	982	982
(OWNED)	975	975	975
(LEASED)	7	7	7

PROGRAM PACKAGE: BASE OPERATIONS (CONT'D)

III. Performance Criteria and EVALUATION      FY 1985      FY 1986      FY 1987

BASE OPERATIONS

OWNERSHIP OPERATIONS

OTHER ENGINEERING SUP (\$000)	12,452	19,759	22,832
ADMINISTRATION (\$000)	12,787	12,688	13,800
NUMBER OF BASES, TOTAL	4	4	4
(CONUS)	4	4	4
(OVERSEAS)			
PHYSICAL SECURITY (\$000)		28	1,342
HAZARDOUS WASTE (\$000)			4,998

IV. Personnel Summary (End Strenght)

A. Military Personnel

FY 1985      FY 1986      FY 1987

Officer	446	475	490
Enlisted	435	436	430

B. Civilian Personnel

USDH	1,414	1,235	1,233
FNIH	107	145	145

**NO-A166 533**

DEPARTMENT OF THE NAVY JUSTIFICATION OF ESTIMATES FOR  
FISCAL YEAR 1987 SU. (U) OFFICE OF THE COMPTROLLER  
(NAVY) WASHINGTON DC FEB 86

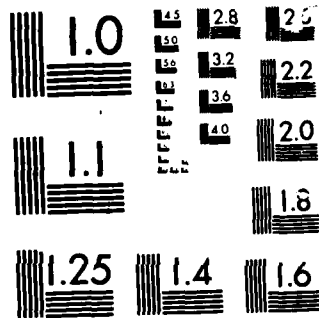
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DEPARTMENT OF THE NAVY  
OPERATION AND MAINTENANCE, NAVY

Activity Group: Electronic Systems Rework and Maintenance  
Budget Activity: VII - Central Supply & Maintenance  
Claimant: Space and Naval Warfare Systems Command

I. Description of Operations Financed.

Air Station Restoration - The Air Station Restoration program improves and sustains the readiness of combat electronic systems, air safety equipment, and command and control equipments ashore by funding the overhaul efforts and extensive field maintenance support of electronic equipment for Communications, Surveillance, Air Traffic Control and aging Navigational Aids (TACAN) systems. Failed equipment is dismantled, rebuilt, bench checked and operationally tested at a designated overhaul point (DOP) prior to its return to operational use. Other larger more costly systems are overhauled at the station by highly skilled field teams on a prearranged scheduled basis to preclude loss of operational availability (A<sub>0</sub>) for extended periods.

Marine Air Traffic Control Squadron (MATCS) - The MATCS Depot Maintenance program provides for the complete restoration of system/sub-system end items according to a predetermined duty cycle supporting Marine Corps aviation combat readiness postures. Through an intensive inspection process, field maintenance reporting system, components at tactical units are identified for induction into depot facilities for the restoration/overhaul process. Many of these equipments are of the Vietnam era and remain functional to the mission by virtue of depot capabilities. Depot rework increases system availability providing safety of flight margins that minimize the risk of aircraft and pilot loss.

22 Cog Electronic Restoration - This program finances restoration of failed communications, surveillance and countermeasures equipments, and tactical data systems (LINK 11). Equipments are sent to an overhaul activity and dismantled, rebuilt, bench-checked and operationally tested at a depot prior to return to operational use. Other larger systems are overhauled in place, afloat, by field teams on a scheduled basis to preclude loss of operational capability for extended periods. Also financed under this program is the removal and restoration of equipments from stricken ships, to provide an alternate source to new procurement for new ship construction. SPAWAR utilizes the support of NAVSEA shipyards to support a segment of its restoration program.

Standards, Calibration and Repair - This program funds calibration and repair of all electronic standards which are laboratory devices used to calibrate other test equipments of lesser accuracy.

Test Equipment Maintenance - Provides for the calibration and repair incidental to calibration, of all fleet-held electronic and electrical test, measurement and diagnostic equipment (TMDE). These equipments are used to install, align, adjust, operate, and maintain all prime electronic and electrical systems in use aboard ships of the active fleet to ensure the material readiness of all radar, sonar, communications, countermeasure, surveillance, navigation, and propulsion systems.

Activity Group: Electronic Systems Rework and Maintenance (cont'd)

I. Description of Operations Financed (cont'd)

Precise Time and Time Interval (PTTI) - This program provides depot level repair and maintenance of Verdin O-1695 Cesium Beam Frequency Standards (CBFS), which require an emergency replacement capability for inoperative units onboard nuclear submarines; the AN/URQ-23 Frequency Time Standard; the SG-1157/V Digital Processing Clock; and provides funds for the relocation of the PTTI Depot.

Cryptographic (Crypto) Repair - This program finances all depot costs for the maintenance, overhaul, repair and modification of fleet cryptographic devices/items and systems that are beyond the capability of the fleet maintenance personnel to perform and all Communications Security (COMSEC) depot maintenance interservicing requirements. This includes all Naval/Marine Corps aircraft installed COMSEC equipment and COMSEC equipment used by the Coast Guard ships forces: all depot level repair/overhaul and modification of the new generation micro-miniature (MICROMIN) constructed COMSEC equipment/devices used in the Naval establishment (including MARCOR and COGARD); and overhaul of all Director, COMSEC Material System (DCMS) managed non-RFI COMSEC assets to meet validated fleet requirements. This program transfers to BA-3 in FY 1987.

Coast Guard Support - This program provides for reimbursement to the Coast Guard for the installation of new electronic equipment to replace obsolete Navy-owned equipment, and for the overhaul and maintenance of electronic equipment furnished by the Navy under an agreement between the Department of the Navy and the Department of Transportation. The electronic material provided to the Coast Guard consists of shipboard electronic test equipment, components and subassemblies to maintain the Coast Guard in a state of readiness to function as a specialized service of the Navy in time of war.

RADIAC Repair - This program calibrates and maintains radiation detection, indication and computation (RADIAC) equipment in a continuous state of operability and readiness within the Navy, Coast Guard, Military Sealift Command, and elements of the Marine Corps. Of the approximately 38,000 Radiac equipments in use, 23,000 are used to measure levels of radiation exposure in medical, nuclear power, weapons handling and radiography applications. Approximately 15,000 additional instruments are positioned on Navy ships and at shore facilities to be used for personnel safety and radiation level measurement in event of nuclear disasters or nuclear warfare. RADIAC equipment must be kept operable in order that personnel, equipment and the environment can be adequately monitored and controlled within medical and legal safety limits of exposure, and maintain the Navy's ability to apply appropriate measures in the event of nuclear war or disaster.

Anti-Ship Missile (Electronic Warfare) System (ASM/EW) - Provides an EW capability to automatically detect, sort and classify, track and continuously display RF emitters, platform types and bearings in the relevant electromagnetic environment, plus automatic electronic countermeasures response on search, targeting and missile associated emitters. Depot Maintenance provides comprehensive overhaul and repair services to Fleet units and installation activities. Efforts range from piece part repair of the shipboard replaceable assemblies (SRA) up to Class B overhauls, Single Repairable Units (SRUs) and maintaining bonded storage of installation checkout (INCO) stock spares.



Activity Group: Electronic Systems Rework and Maintenance (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

		FY 1986			FY 1987	
	FY 1985	Budget Request	Appro- priation	Current Estimate	Budget Request	Change
Air Station Restoration	5,841	10,233	10,305	7,546	8,790	1,244
MATCS	4,022	3,232	3,272	3,179	3,064	-115
22 Cog Restoration	12,112	14,129	14,288	13,620	14,617	997
Standards, Cal & Repair	4,485	7,881	7,865	7,637	7,891	254
Test Equipment Maintenance	8,151	17,405	17,327	16,904	16,753	-151
PTTI	247	303	311	294	351	57
Cryptographic Repair	7,820	10,874	10,892	10,064	0	-10,064
Coast Guard Support	3,433	6,540	6,510	6,309	7,827	1,518
RADIAC Repair	4,133	6,710	6,680	6,095	8,117	2,022
Anti-Ship Missile (EW)	<u>11,822</u>	<u>7,459</u>	<u>7,670</u>	<u>7,549</u>	<u>11,595</u>	<u>4,046</u>
TOTAL O&M,N	62,066	84,766	85,120	79,197	79,005	-192

Activity Group: Electronic Systems Rework and Maintenance (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1986 Current Estimate		\$79,197
2. Pricing Adjustments		1,343
A. Industrial Fund Rates	(-20)	
B. Average Grade Reduction	(-101)	
C. Annualization of Civilian Health Benefits Costs	(-7)	
D. Other Pricing Adjustments	(1,471)	
3. Functional Program Transfer		-10,171
A. Transfers-out	(-10,171)	
1. Intra-Appropriation		
Crypto Repair - Program	-10,171	
transferring to Budget		
Activity III (COMSEC).		
4. Program Increases		10,250
A. Other Program Increases in FY 1987	(10,250)	
1) <u>Air Station Restoration</u>	1,491	
Increased restoration efforts		
for (1) TACAN/EFM from 5 units		
to 10 units, (2) Nets/EFM Systems		
from 55 units to 57 units and		
other equipment restoration from		
877 units to 881 units.		
2) <u>2Z Restoration</u>	909	
Increased equipment restorations		
from 840 to 870 units and		
increased link II systems		
components overhauls from 2		
systems to 3 systems.		
3) <u>Standards, Calibration and Repair</u>	128	
Provides 55 more fleet calibrations.		
4) <u>PTTI</u>	49	
Provides increased calibrations/		
restorations due to aging of		
Cesium Standards and other clocks.		
5) <u>Coast Guard</u>	1,633	
Provides for 813 more units		
which will be overhauled and		
maintained.		
6) <u>Radiac</u>	2,019	
Increase will permit the radiac		
repair facilities to calibrate an		
additional 13,909 units.		
7) <u>ASM(EW)</u>	4,021	
Provides for a reduction of the		
Class "B" overhaul backlog. This		
will enable the fleet to maintain an		
increased level of spares availability.		

Activity Group: Electronic Systems Rework and Maintenance (cont'd)

B. Reconciliation of Increases and Decreases.

5. Program Decreases

-1,614

A. Annualization of FY 1986 Decreases (-402)

- 1) Continued implementation of Audit -402  
Savings identified in FY 1986.

B. Other Program Decreases in FY 1987 (-1,212)

- 1) MATCS - Reflects reduction in -234

the repair of overhaul kits for the AN/TSQ-107 receiver and antenna drive. One less TRN-33 UHF-Beacon and one less TRC-131 mobile ATC tower will require restoration in FY 1987, and one less set of communications antenna and mobilizers and fewer items of standard test equipment will require restoration in FY 1987.

- 2) Test Equipment Maintenance -555

Decrease reflects 3,042 fewer General Purpose Electronic Test Equipment (GPETE) calibrations for the fleet.

- 3) Air Station Restorations -423

Decrease will result in 4 less NAVAIDS Restorations, and 3 less Ground Controlled Approach/Extension Field Maintenance (GCA/EFM) Restorations.

6. FY 1987 President's Budget Request

\$79,005

Activity Group: Electronic Systems Rework and Maintenance (cont'd)

III. Performance Criteria

Air Station Restoration

	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
TACAN EFM	8/ 360	5/ 225	10/ 460
NAVAIDS	10/ 545	9/ 500	5/ 300
GCA EFM	11/ 1,353	10/ 1,370	7/ 1,071
NETS EFM	65/ 1,650	55/ 1,404	57/ 1,539
EQUIPMENT RESTORATION	460/ 1,933	877/ 4,047	881/ 5,420
TOTALS	5,841	7,546	8,790

MATCS

Instrument Landing System (ILS)	7/ 231*	12/ 420*	12/ 612*
RADAR Surveillance Central	3/ 1,172*	3/ 333*	4/ 750*
RADAR Overhaul Kit	6/ 953	4/ 832	0/ 0
UHF Beacon	3/ 162	4/ 232	3/ 180
Mobile ATC Tower	4/ 120	5/ 165	4/ 140
Generators	10/ 390	10/ 430	12/ 540
Antennas & Mobilizers	11/ 242	5/ 165	4/ 144
DLR's	/ 600	/ 446	/ 585
Test & Support Equipment	/ 152	/ 156	/ 113
TOTAL Restorations Financed	44/ 4,022	43/ 3,179	39/ 3,064

\*Various configurations

22 Cog Electronic Restoration

Electronic Restorations	752/ 9,150	840/10,506	870/10,879
TACAN Reliability Improvement Prog	22/ 1,180	25/ 1,350	26/ 1,092
Tactical Data Systems (LINK 11)	2/ 1,154	2/ 1,142	3/ 1,713
Aircraft Carrier Landing Systems	2/ 628	2/ 622	3/ 933
TOTAL	12,112	13,620	14,617

Activity Group: Electronic Systems Rework and Maintenance (cont'd)

III. Performance Criteria

Standards, Calibration and Repair

	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
Calibrations Financed	11,831/ 4,485	19,333/ 7,637	19,388/ 7,891

Test Equipment Maintenance

Calibrations Financed	41,584/ 8,151	81,705/16,904	78,663/16,753
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Precise Time and Time Interval

Cesium Standards	343/ 211	379/ 239	398/ 293
Other Clocks	21/ 29	35/ 48	36/ 51
Time Frequency Equipment	18/ 7	17/ 7	17/ 7
TOTAL PTTI Units	382/ 247	431/ 294	451/ 351
Calibrated/Restored			

Cryptographic Repair

Record and data crypto equipment	12,824/ 6,258	13,335/ 7,479	0/0
Secure Voice crypto equip	6,549/ 1,120	9,577/ 1,714	0/0
Code changes permuters, key guns, card readers and common fill devices	4,745/ 408	7,300/ 715	0/0
Crypto special test equipment	30/ 3	120/ 13	0/0
Off line and misc. crypto equipment	120/ 31	485/ 143	0/0
TOTAL Number of Maintenance Actions Financed	24,268/ 7,820	30,817/10,064	0/0

Activity Group: Electronic Systems Rework and Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Coast Guard Support

	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
Number of vessels supported	177	177	177
Overhaul and maintenance requirements	5,759/8,119	5,759/8,533	5,759/8,889
Number of units overhauled and maintained	2,435/ <u>3,433</u>	4,258/ <u>6,309</u>	5,071/ <u>7,827</u>
TOTAL Cost of Units Funded (\$000)	3,433	6,309	7,827

RADIAC Repair

Number of units funded	33,186	47,476	61,385
Unit Cost	124.54	128.38	132.23
TOTAL Cost of Units Funded (\$000)	4,133	6,095	8,117

Anti-Ship Missile EW Systems (ASM/EW)

Planned Overhaul/Refurbish Systems	33	36	47
Financed Overhaul/Refurbish Systems	29/8,502	25/5,499	38/8,427
Planned Depot Maint of Spares (SRU/SRA/INCO)	300	200	230
Financed Depot Maint of Spares (SRU/SRA/INCO)	293/ <u>3,320</u>	187/ <u>2,050</u>	216/ <u>3,168</u>
TOTAL ASM(EW) Funding	11,822	7,549	11,595

Note 1: The average unit cost of refurbishments is dependent upon the workload (economic quantity) and the mix of SLQ-32 variants.

Note 2: The average unit cost of repair is dependent upon the mix of SRUs/SRAs and predicted failure rates per operational system.

IV. Personnel Summary - NONE

DEPARTMENT OF THE NAVY  
OPERATION AND MAINTENANCE, NAVY

Activity Group: Maintenance Support  
Budget Activity: VII - Central Supply & Maintenance  
Claimant: Space and Naval Warfare Systems Command

I. Description of Operations Financed

Marine Air Traffic Control Squadron (MATCS) Maintenance Support - The MATCS Maintenance Support Program provides the external engineering support necessary to maintain the combat readiness posture of transportable tactical air traffic control and landing systems that support the four Marine Aircraft Wings. The program finances installation; centralized standardization of systems, subsystems and equipments; planned product improvements, tests, measurement and diagnostic support; centralized software support; training (formal and OJT); and organizational level maintenance support.

Standards, Calibration and Repair Maintenance Support - This program includes engineering efforts at the Metrology Engineering Center to improve measuring techniques, upgrade Navy calibration standards and equipments, assign and modify calibration intervals for test equipments, conduct audits of calibration laboratories, and is developing calibration standards required to complete laboratory workload at all standards laboratories.

Test Equipment Maintenance Support - This program provides for the technical support of all fleet-held electronic and electrical test, measurement and diagnostic equipment (TMDE). These equipments are used to install, align, adjust, operate and maintain all prime electronic and electrical systems in use aboard ships of the active fleet to ensure the material readiness of all radar, sonar, communications, countermeasure, surveillance, navigation, and propulsion systems. This program also provides for the continuation of the Measurement Equipment Automated System for Uniform Reporting and Evaluation (MEASURE) program to manage the maintenance of the test equipment inventory and the General Purpose Equipment Test and Evaluation (GPETE) Assets Screening Program (GASP), Shore Allowance Program to develop GPETE Maintenance Plans, Electronic Test and Equipment Maintenance Plans, MEASURE data base, MECCA Training and Navy Training Plan for GPETE.

Precise Time and Time Interval (PTTI) Maintenance Support - This program provides engineering support and quality assurance for the Verdin 0-1695 A/U Cesium Frequency Standards (CBFS); the AN/URQ-23 Frequency-Time Standard; the SG-1157/V Digital Processing Clock; and the Model CBFS; also provides funds for the scheduled relocation of the cesium standard depot. The PTTI program also provides for time calibration via portable clock trips and operational and maintenance training for PTTI users. The contractor tracks the locations of all CBFS and publishes a monthly report of this effort. Also the contractor records and performs analysis of failure data of the frequency standards on a real time basis.

Activity Group: Maintenance Support (cont'd)

I. Description of Operations Financed (cont'd)

Cryptographic (Crypto) Repair Maintenance Support - The Crypto Repair program provides for the maintenance of Communications Security (COMSEC) documentation, and for system operation and verification tests on automatic and manual Secure Audio System (SAS) shipyard installations to ensure that no technical problems exist prior to ship deployment. Installation of the second generation COMSEC devices significantly increases the support for major influxes of new equipment. This effort is essential to ensure reliability and maintainability of the communications systems.

RADIAC Repair Maintenance Support - Provides for: (1) RADIAC coordination by SPAWAR RADIAC Field Managers and RADIAC Coordinators at selected locations throughout the country and abroad, who act as liaisons between SPAWAR and the fleet or other customers in order to provide quick response to any problem with RADIAC equipment maintenance and radioactivity control; assist the fleet in obtaining emergency replacements of equipment required for inoperable or lost RADIAC equipment; ensure that shore RADIAC allowances and inventories are current; coordinate funding requirements and monitor workload scheduling and performance of the sixteen (16) RADIAC Repair Facilities which calibrate RADIAC equipment; and assure compliance with SPAWAR, NRC and local regulations governing radioactive material and sources used in connection with the RADIAC program; (2) maintenance of the Measurement Equipment Automated System for Uniform Reporting and Evaluation (MEASURE) data flow and accuracy for RADIAC equipment; (3) lead activity/engineering support for implementation and tracking of field changes, formulation of standard maintenance and calibration procedures, maintenance of applicable approved parts lists, and review of the Planned Maintenance Sub-systems (PMS) documentation for RADIAC equipments; (4) technical and engineering support services directly related to engineering, technical and logistics projects supporting the RADIAC Program for such specific programs as the Thermoluminescent Dosimetry (TLD) and Air Particle Detector quality assurance programs; maintenance of standards pools, fleet support, maintenance and support TRITIUM equipment; QPL testing of quartz fiber dosimeter; and management of a RADIAC test and evaluation facility; and (5) provides for standardization of fleet and shore RADIAC calibrators and performance of acquisition engineering services by NAVELEXCEN Charleston.

Anti-Ship Missile (Electronic Warfare) System ASM(EW) Maintenance Support - Provides an EW capability to automatically detect, sort and classify, track and continuously display RF emitters, platform types, and bearings in the relevant electromagnetic targeting and missile associated emitters. Support is provided in 4 major categories: Life-cycle software support including threat libraries; Fleet Maintenance Activity (FMA); engineering technical services; and Intermediate Maintenance Activity (IMA) support. Specifically, the threat library effort includes coding threat parameter data; revising and testing detection/display/response algorithms; validation testing utilizing the Tactical EW Environmental Simulator (TEWES) at Dahlgren; computer tape production and distribution; and Fleet software status accounting.



Activity Group: Maintenance Support (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

		FY 1986			FY 1987	
	<u>FY 1985</u>	<u>Budget Request</u>	<u>Appro- priation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	<u>Change</u>
MATCS Maintenance Support	4,309	5,331	5,308	5,268	5,274	6
Standards, Cal & Rpr Mnt Spt	2,244	2,434	1,979	2,406	2,175	-231
Test Equipment Mnt Spt	6,316	3,207	3,220	3,137	3,240	103
PTTI Maintenance Support	924	994	999	944	900	-44
Cryptographic Rpr Mnt Spt	850	1,804	1,797	1,791	-0-	-1,791
RADIAC Maintenance Support	2,475	2,738	2,749	2,725	2,949	224
ASM (EW) Maintenance Spt	<u>14,812</u>	<u>22,757</u>	<u>22,641</u>	<u>19,050</u>	<u>18,892</u>	<u>-158</u>
TOTAL Maintenance Support	31,930	39,265	38,693	35,321	33,430	-1,891

Activity Group: Maintenance Support (cont'd)

B. Reconciliation of Increases and Decreases.

	<u>Amount</u>
1. FY 1986 Current Estimate	\$35,321
2. Pricing Adjustments	1,148
A. Stock Fund	(-9)
1) Non-Fuel	-9
B. Industrial Fund Rates	(351)
C. Average Grade Reduction	(-16)
D. Annualization of Civilian Health Benefits Cost	(-1)
E. Other Pricing Adjustments	(823)
3. Functional Program Transfers	-1,859
A. Transfers-out	(-1,859)
1) Intra-Appropriation	-1,859
Cryptographic Repair Maintenance support transferring to BA 3 (Communications Security).	
4. Program Increases	1,009
A. Other Program Growth in FY 1987	(1,009)
1) <u>RADIAC Repair Maintenance Support</u> -	270
Provides funding increase of one workyear of effort in the RADIAC/Coordinator/Field Manager Program (required for RADIAC Repair Facility management, workload monitoring, allowance management and audits). Increase will also provide for an additional workyear of effort required through shipyards and SPAWAR field activities in the areas of acquisition engineering services, technical expertise and lead activity functions.	
2) <u>MATCS</u> - Program provides increase for Inspections (17), MATCALS Testing (199), MATCS Squadrons Maintenance Funding (294), SSA Maintenance Facility (8), OJT/PMS Engineering Support (95) and CAAS (126).	739

Activity Group: Maintenance Support (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

5. Program Decreases	-2,189
A. Annualization of FY 1986 Decreases	(-101)
1) Continued Implementation of Audit Savings.	-101
B. Other Program Decreases in FY 1987	(-2,088)
1) <u>MATCS</u> - Program decreases as a result of Terpes Migrating to the Marine Corps (-300), and reduction in support of installation (-552).	-852
2) <u>Standards Calibration &amp; Repair</u> - 7 fewer calibration work stations will be updated and 54 instrument calibration procedures will not be developed.	-361
3) <u>Test Equipment</u> - Decrease will result development of 58 fewer shore allowances	-15
4) <u>Precise Time and Time Interval</u> - Decrease will reduce engineering support for Cesium Beam Frequency Standards.	-68
5) <u>Anti-Ship Missile EW System-ASM(EW) Maintenance</u> - Decrease reflects (A) reduction of software maintenance by nine work years of effort, (b) reduction of intermediate maintenance four work years of effort.	-792
6. FY 1987 President's Budget Request	\$33,430

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria.

Marine Air Traffic Control  
Squadrons (MATCS)  
Maintenance Support

		<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
Installations				
Financed		16/ 495	32/1,110	21/ 640
Inspections				
Financed		2/ 60	3/ 76	4/ 100
Tests				
Financed		1/ 300	1/ 400	1/ 608
MATCS Maintenance Support (Squadron)				
Financed		4/1,424	4/1,800	4/2,135
SSA Maintenance Facility				
Financed		13/ 801	12/ 726	12/ 750
Engineering Support (Vallejo) OJT/PMS				
Financed		8/ 227	9/ 350	11/ 398
Support Contractor	Financed	8/ 566	7/ 506	9/ 643
TERPES				
Financed		5/ 436	4/ 300	_____
TOTAL		4,309	5,268	5,274

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria.

	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
<u>Standards, Calibration and</u>			
<u>Repair Maintenance Support</u>			
FCTR Salaries	5 MY/ 256		
CALSTAR	4 MY/ 212		
DETMECH ADP	1 MY/ 50		
Maint Philosophy	3 MY/ 124		
Standardization	3 MY/ 137		
GPETE Status Reports	2 MY/ 87		
QRC Transaction Report		4/ 55	4/ 55
QRTEC Transaction Report		4/ 54	4/ 55
New Cal Stds Allowance		52/ 113	52/ 113
Maintain Cal Stds Allowance		56/ 99	56/ 99
NAEC Cal Stds Procurement		3 MY/ 146	3 MY/ 146
Metrology Engineering Center	18 MY/ 1,242		
Work Station Update		29/ 900	22/ 763
Cal Application Document		413/ 1,039	359/ 944
Cal Stds Procurement Spt	190/ 85		
Field Activity Liaison	100/ 51		
TOTAL	2,244	2,406	2,175
<u>Test Equipment Maintenance</u>			
<u>Support</u>			
MEASURE Recalls	130/ 1,435	130/ 1,535	130/ 1,703
Naval Training Plans	5/ 50		
GASP Transactions	3,610/ 435		
Standards Applications Lists			
Engineering Evaluations	269/ 340		
FCA Audits	55/ 130		
Shore Allowances	3,060/ 725	937/ 225	879/ 150
ILS for GPETE	10/ 175		
Test Equip Grouping Sys	1,502/ 215		
Develop Maint Plans	35/ 228		
Measure Data Base	8/ 460	9/ 490	9/ 490
MECCA Training	1/ 100		
NESEA Standardization	2/ 100		
NESEA Acquisition	2/ 182		
NESEA RQMTS Process	2/ 99		
GPETE Reallocation	1/ 68		
Certification Contract SPT	5/ 285		
Screening/Induction	4/ 260		
Lab Certification	1/ 72		
FCTR Functions	74,418/ 957	68,231/ 887	68,231/ 897
TOTAL	6,316	3,137	3,240

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria.

Precise Time and Time  
Interval (PTTI)  
Maintenance Support

	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
Portable Clock and Emergency Clock Visits:			
Financed	3/ 312	2/ 232	3/ 343
Cesium Beam Replacement:			
Financed	96/ 612	113/ 712	88/ 557
Total Funding:	924	944	900

Cryptographic Repair  
Maintenance Support

Operational verification/ acceptance tests on SAS installations (#/\$000)	25/ 430	64/1,203	0
Technical support & planning documentation (MY/\$000)	10/ 420	13/ 588	0
Total Funding:	850	1,791	0

RADIAC Repair  
Maintenance Support

RADIAC Coordinators	9/ 500	10/ 600	11/ 690
Engineering Support	13/ 680	12/ 670	13/ 784
Technical Services Support	14/1,070	15/1,255	15/1,275
Measure Program Management	4/ 225	3/ 200	3/ 200
Total Funding:	2,475	2,725	2,949

ASM(EW)  
Maintenance Support

Life Cycle Software (# ships)	245/6,747	265/5,390	290/4,615
Threat Libraries	3/ 849	3/1,000	3/1,000
FMA (# ships)	245/5,100	265/6,384	290/6,959
Eng Tech Svcs (# ships)	245/1,000	265/2,891	290/3,151
IMA Support (# ships)	245/1,116	265/3,385	290/3,167
Total Funding:	14,812	19,050	18,892

IV. Personnel Summary - NONE

DEPARTMENT OF THE NAVY  
OPERATION AND MAINTENANCE, NAVY

Activity Group: Procurement Operations  
Budget Activity: VII - Central Supply & Maintenance  
Claimant: Space and Naval Warfare Systems Command

I. Description of Operations Financed

Project Management Offices - This program provides administrative and technical staffs who support "cradle-to-grave" responsibility for acquisition programs. Functions include centralized procurement, engineering and technical services, logistics support and other procurement related activities. They provide systems integration to ensure a fully coordinated and timely efforts for the following: Navy Space Project Office, REWSON Systems Project Office, Joint Tactical Information Distribution System Project Office, Communications Systems Project Office, Command Systems Project Office, Undersea Surveillance Project Office and the Marine Corps Systems Project Office.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

			FY 1986		FY 1987	
		Budget Request	Appropriation	Current Estimate	Budget Request	Change
Project Management Offices	36,292	36,292	37,537	37,937	37,312	-625
TOTAL Procurement Operations	36,292	36,292	37,537	37,937	37,312	-625

Activity Group: Procurement Operations (cont'd)

<u>B. Reconciliation of Increases and Decreases.</u>		<u>Amount</u>
1. FY 1986 Current Estimate		\$37,937
2. Pricing Adjustments		-115
A. Stock Fund	(2)	
1) Non-Fuel	2	
B. Industrial Fund Rates	(2)	
C. Average Grade Reduction	(-153)	
D. Annualization Health	(-11)	
Benefits Cost		
E. Other Pricing	(45)	
3. Program Increases		210
A. Other Program Growth in FY 1987	(210)	
A. The additional end strengths	210	
will be utilized as follows:		
+1 To provide engineering		
support to the Navy Space Program;		
+1 To provide logistics planning,		
production and installation requirements		
for the Strategic Communications Program;		
+3 To support planning, budgeting,		
and financial execution efforts to		
the following programs:		
Combat Cryptologic Support Console		
Combat Cryptologic Support System		
Navy Cover and Deception Program		
(Shipborne and Offboard devices)		
Counter C <sup>3</sup> Development Program		
(Counter Communications and		
Counter Targeting/Surveillance)		
Electronic Warfare Coordination Module		
Countermeasures Assessment Simulator		
Battle Group Passive Horizon Extension System		
Naval Warfare/Tactics Documentation Support		
4. Program Decreases		-720
A. Other Program Decreases in FY 1987	(-720)	
1) Savings projected to result	-54	
from scheduled efficiency reviews		
2) -2 E/S from relocatable -	-98	
over-the-horizon radar		
3) Reduction in lease costs due	-544	
to buyout of equipment (-62),		
decrease in publications and related		
materials (-24), decrease in PCS		
costs (-156), decrease in training		
and related costs (-302). Funds for		
PCS and Training were migrated to		
Operational Support - Field		

70397



Activity Group: Procurement Operations (cont'd)

III. Performance Criteria

Program Decreases (cont'd)

- 4) Realignment to the Naval Security and Investigative Command of the responsibility to adjudicate personnel security clearances (-1 E/S) -24

5. FY 1987 President's Budget Request

\$37,312

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
NAVY SPACE PROJECT	4,415	4,173	4,104
REWSON SYSTEMS PROJECT	6,422	6,070	5,970
JOINT TACTICAL INFORMATION DIST. SYS	2,409	2,276	2,239
COMMUNICATIONS SYSTEMS PROJECT	9,634	9,105	8,955
COMMAND SYSTEMS PROJECT	12,442	11,760	11,566
UNDERSEA SURVEILLANCE OFFICE	2,810	2,656	2,612
MARINE CORPS PROJECT	<u>2,007</u>	<u>1,897</u>	<u>1,866</u>
	40,139	37,937	37,312

NAVY SPACE PROJECT OFFICE

The Navy Space Project Office exercises program management, including design, development, procurement and operational use of all Navy Space Systems. This responsibility includes all activities within the purview of the Naval Material establishment and related to the Military use of Space, including but not limited to, broad areas of: Communications, Navigation, Surveillance, Environmental Observations, Space Defense and Geodesy.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
FUNDING			
PROFILE:	4,415	4,173	4,104

REWSON SYSTEMS PROJECT OFFICE

REWSON Systems Project Office supports the system integration and coordination authority with respect to Reconnaissance, Electronic Warfare, Special Operations, and Naval Intelligence Systems. The project office manages the design and operational applications of all electronic equipments and systems to ensure compatibility between the various systems and subsystems, and that cost effective capabilities are developed and produced.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
FUNDING			
PROFILE:	6,422	6,070	5,970

JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS) PROJECT OFFICE

The JTIDS Project Office manages: (1) the full scale development to satisfy the requirements to the Joint Tactical Information Distribution System for Navy and Marine Corps applications; (2) the development of related support equipment; (3)

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria

Program Decreases (cont'd)

integration of the systems in various tactical platforms; and (4) the associated technical and management data.

FUNDING	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
PROFILE:	2,409	2,276	2,239

COMMUNICATIONS SYSTEMS PROJECT OFFICE

The Communications Systems Project Office manages communication systems assigned by COMSPAWAR to satisfy the mission of assuring positive command and control of strategic and tactical forces ashore and afloat. Management authority and responsibility encompasses end-to-end planning, development, test and evaluation, acquisition and integration of all Navy Advanced Communications Security Systems, Display Systems, Data Links and Strategic and Tactical Communication Systems.

FUNDING	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
PROFILE:	9,634	9,105	8,955

COMMAND SYSTEMS PROJECT OFFICE

The Command Systems Project Office exercises systems management authority and project management execution for Command Systems Engineering, including Navy Command and Control Systems (NCCS) Ashore, Tactical Flag Command Center (TFCC), Ocean Surveillance Information System (OSIS), Anti-Submarine Warfare Operations Centers (ASWOC), World Wide Military Command and Control System (WWMCCS), Remote Sensors Systems, FACSFAC, Surveillance and Navigation Systems, Over-The-Horizon Targeting (OTH-T) Projects, ATC/Landing, Tactical Data Links, IFF Systems, Air to Ground Communications, and Battle Group Tactical Training System.

In addition, it provides support engineering and administration of the ASWOC Program at the engineering development and system prototype facility. Activities include support of both the Baseline ASWOC systems supervision of Hardware and Software maintenance, and target USW Technologies and Threats.

FUNDING	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
PROFILE:	12,442	11,760	11,566

UNDERSEA SURVEILLANCE OFFICE

The Undersea Surveillance Office was established in April 1972 as the successor to Project Caesar and was tasked to develop an integrated undersea surveillance system, including responsibility for management and technical control of the Space and Naval Warfare Systems Command Undersea Surveillance Program in advanced development, engineering development and operational development.

The program is comprised of fixed bottom mounted arrays and towed arrays, whose mission is to assist tactical forces in the detection of potential enemy submarines throughout wide ocean areas.

FUNDING	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
PROFILE:	2,810	2,656	2,612

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria (cont'd)

MARINE CORPS SYSTEMS PROJECT OFFICE

The Marine Corps Systems Project office includes Marine Corps, Navy, and other customer (Air Force, Army and FMS) funded programs and provides material support to the Marine Corps. Projects include facilities, equipment, procedures, software, personnel training and the integration of subsystems for use of the Fleet Marine Forces as an integral part of the Naval Operating Fleets. It also involves those systems assigned to the Marine Corps for development in support of other U.S. Military Forces or Allied Forces. The project also provides the PPBS, development, testing, production, and life cycle management for Fleet Marine Forces Air Traffic Control and other USMC Aviation Support Systems.

FUNDING	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
PROFILE:	2,007	1,897	1,866

IV. Personnel Summary (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>	<u>45</u>	<u>53</u>	<u>53</u>
Officer	37	43	43
Enlisted	10	10	10
B. <u>Civilian</u>	<u>886</u>	<u>864</u>	<u>866</u>
USDH	886	864	866

DEPARTMENT OF THE NAVY  
OPERATION AND MAINTENANCE, NAVY

Activity Group: Command & Administration  
Budget Activity: VII - Central Supply & Maintenance  
Claimant: Space and Naval Warfare Systems Command

I. Description of Operations Financed

The Command and Administration program provides an organization which plans, develops, executes, and manages the activities. The command organization maintains the processes and systems to meet the Command's mission. This organization administers the functions of the Inspector General, Office of Small Business, Congressional and Public Affairs, Command Deputy Equal Employment Opportunity Office, Mobilization/Contingency Plans and Operations Office, Comptroller Directorate, Administrative Services Division and other administrative offices.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

	FY 1985	Budget Request	FY 1986 Appro- priation	Current Estimate	FY 1987 Budget Request	Change
Command and Administration	<u>7,308</u>	<u>5,911</u>	<u>6,108</u>	<u>6,747</u>	<u>6,728</u>	<u>-19</u>
Total Command and Administration	7,308	5,911	6,108	6,747	6,728	-19

Activity Group: Command & Administration (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1986 Current Estimate		\$6,747
2. Pricing Adjustments		21
A. Stock Fund	(6)	
1) Non-Fuel	6	
B. Industrial Fund Rates	(13)	
C. Average Grade Reduction	(-36)	
D. Annualization of Health Benefits	(-3)	
Costs		
E. Other Pricing	(41)	
3. Program Decreases		-40
A. Other Program Decreases in FY 1987	(-40)	
1. Decrease in purchase of	-40	
service managed supplies		
and materials.		
4. FY 1987 President's Budget Request		\$6,728

Activity Group: Command & Administration (cont'd)

III. Performance Criteria

The Command and Administration program provides the staff necessary to manage headquarters functions as defined by the Secretary of Defense; directs Command-wide policy and planning, and controls and allocates financial resources and manpower to provide efficient support of the mission in conformance with legal and regulatory limitations and evaluations, Command-wide, and in support of field activity management units.

IV. Personnel Summary (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>	<u>13</u>	<u>15</u>	<u>15</u>
Officer	11	13	13
Enlisted	2	2	2
B. <u>Civilian</u>	<u>180</u>	<u>158</u>	<u>158</u>
USDH	180	158	158

DEPARTMENT OF THE NAVY  
OPERATION AND MAINTENANCE, NAVY

Activity Group: Field Operations  
Budget Activity: VII - Central Supply & Maintenance  
Claimant: Space and Naval Warfare Systems Command

I. Description of Operations Financed

Field Operations - This program finances the day-to-day operations of the field activities management personnel (supervisory, financial, contractual and administrative). Included are costs for office supplies and equipment, mission travel, administrative training, data processing, printing and reproduction, transportation of things. It also finances costs associated with ADP (maintenance and leasing), general technical report production, and audiovisuals. The Field Operations program provides maintenance and technical support of equipments for ashore and afloat forces.

Operational Support - Field - This program finances the salaries, administrative expenses and travel of personnel who are engaged in the design, development, acquisition, and logistics support of surveillance, space, intelligence, security, command and control, communications, electronic warfare, air traffic control, and navigational systems for the field activities. Additionally, the Operational Support - Field Program manages technical programs to ensure the security and integrity of Navy ADP systems, acts as the lead agency for the laser safety program and is the primary technical authority for electronic standards, standardization, techniques, practices and compatibility.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

	FY 1985	Budget Request	FY 1986 Appro- priation	Current Estimate	FY 1987 Budget Request	Change
Field Operations	29,188	29,913	30,398	30,398	31,289	891
Operational Support - Field	<u>23,431</u>	<u>20,946</u>	<u>20,076</u>	<u>21,673</u>	<u>21,075</u>	<u>-598</u>
TOTAL Field Operations	52,619	50,859	50,474	52,071	52,364	293

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1986 Current Estimate		\$52,071
2. Pricing Adjustments		249
A. Stock Fund	(18)	
1) Non-Fuel	18	
B. Industrial Fund Rates	(55)	
C. Average Grade Reduction	(-224)	
D. Annualization of Civilian Health Benefits Cost	(-25)	
E. Other Pricing	(425)	
3. Program Increases		1,794
A. Other Program Growth in FY 1987	(1,794)	
1. <u>Field Operations</u> - Increase in contractual costs for staging operations at NAVELEXSYSENGCEN, Portsmouth, Va. (314); increase in host tenant agreements for SPAWAR Field Activities (291); increase in equipment maintenance due to Prior year ADP equipment purchases (290); Increase in Administrative Costs due to increase in reimbursable work performed. (128).	1,023	
2. <u>Operational Support - Field</u>	771	
Increase in PCS costs associated with recruiting of technical personnel and relocating them to Headquarters Activities (741), funds have been migrated from Procurement Operations and Field Operations to partially fund this increase (458 of the 741); and realignment of training requirements (30) for which funds have been migrated from Procurement Operations.		
4. Program Decreases		-1,750
A. Annualization of FY 1986 Decreases	(-1,396)	
1. <u>Operational Support - Field</u> - Reductions associated with DON initiatives to streamline the organizational and program management structure of the Naval Material establishment.	-1,396	



Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

B. Other Program Decreases in FY 1987 (-354)

1. Field Operations - Reduction in -354  
CAAS requirements (-268); reduction of  
PCS costs (-86). PCS costs have been  
partially migrated to Operational  
Support-Field.

5. FY 1987 President's Budget Request

\$52,364

III. Performance Criteria

Field Operations

The Space and Naval Warfare Systems Command (SPAWAR) Field Operations is comprised of 4 Naval Electronic Systems Engineering Centers at Charleston, S.C., San Diego, CA., Portsmouth, VA. and Vallejo, CA., 1 Systems Engineering Activity located at St. Inigoes, MD. and two Naval Electronics Systems Engineering Detachments at Patuxent River, MD. and Mechanicsburg, PA. Strategically located shore activities provide planning, implementation, coordination and management control of shore and shipboard electronic equipment under SPAWAR cognizance in support of direct Fleet Activities and Combat Forces. Resources provide for direct salaries and administrative support for 632 civilian personnel (FY 1987), and administrative support costs for 56 military personnel and 1162 civilian personnel who provide design and engineering, inspection and testing of electronic installations, major equipment repair and engineering/technical assistance for electronic systems and equipments.

Operational Support - Field

The Operational Support - Field Program provides the Navy, Marine Corps and Coast Guard with electronic systems for processing and transfer of information between all military users. These applications can include ship and shore electronic warfare detection and weapons control, development, acquisition, and logistics support of surveillance, space, intelligence, security, contracts command and control, communications, electronic warfare, air traffic control, and navigational systems for field activities. Additionally, the Operational Support-Field Program provides development and management of technical programs to ensure the security and integrity of Navy ADP systems; acts as the lead agency for the laser safety program; and is the primary technical authority for electronic standards standardization techniques, practices and compatibility. Operational Support Field is responsible for ensuring timely, cost effective and efficient life cycle support for all SPAWAR electronic equipment systems, including the execution and coordination of those equipment systems in afloat platforms. Advance planning, architectural/functional designs, and engineering for systems comprising the Navy's Command Central Communications and Intelligence (C3I) Systems is also provided.

Activity Group: Field Operations (cont'd)

IV. Personnel Summary (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>	<u>103</u>	<u>150</u>	<u>146</u>
Officer	74	108	103
Enlisted	29	42	43
B. <u>Civilian</u>	<u>1,205</u>	<u>1,055</u>	<u>1,055</u>
USDH	1,205	1,055	1,055

70407

DEPARTMENT OF THE NAVY  
OPERATION AND MAINTENANCE, NAVY

Activity Group: Logistics Support Services  
Budget Activity: VII - Central Supply & Maintenance  
Claimant: Space and Naval Warfare Systems Command

I. Description of Operations Financed

Standardization - Provides for the standardization of equipment, parts, material and related software, procedures and techniques in order to facilitate opportunities for interoperability and shared logistics support with friendly forces. These efforts are designed to increase fleet readiness and ensure adequate support of weapons systems through improved technical documentation, reduced dollar resources, manpower and skill requirements for their maintenance and operation.

Remote Sensors - Provides for engineering, technical support, installation and centralized management of the Intrusion Detection Systems (IDS) to allow security forces an early electronic warning of both the presence and approximate location of an intruder. The systems are installed at Special Ammunition Storage (SAS) sites and at Arms, Ammunition and Explosive (AA&E) sites. The program also includes an on-going SAS site retrofit and an upgrade effort to ensure that installed IDS meet current security criteria. This includes installing new components such as tower maps, and replacing non-supportable equipment that is beyond economic repair. The AA&E sites that will receive the highest priority are those sites which contain Category I material (hand-held, portable, ready-to-fire rockets and launchers, etc.).

SSN-Integrated Communications System (SSN-ICS) - Provides the attack submarine fleet with improved communication centers capable of responding to various mission requirements. The program supports the SSN 688 Class radio room by enhancing its capabilities through engineering changes and the addition of new improvements. This program provides repair and maintenance service for system hardware and software, engineering and technical services, configuration management and control, and technical support and management assistance for new equipments introduced into the Fleet. A high priority portion of the program is the Data Link Communications Systems (DLCS), a major subsystem of the Over-the-Horizon-Targeting (OTH-T)/TOMAHAWK capability, which will introduce to the SSN Class Submarine nine complex subsystems of electronic equipment. In addition, this program funds the Submarine Antenna function to ensure that current technical and operational documentation is available to support the submarine mission; that technically qualified personnel are stationed throughout the world to assist in inspection, investigation, maintenance, and fleet liaison for submarine antenna problems; that logistics and engineering services support are available; that support to the operation of an antenna range is provided; and that it provides inservice engineering agent support to the fleet. For support of the radio room and antenna systems, operations and maintenance funds are required to support approximately 4500 equipment items being procured, installed, or already installed on the attack submarine fleet.

Activity Group: Logistics Support Services (cont'd)

I. Description of Operations Financed (cont'd)

Safety - Is divided between Electronic Systems Safety and Laser Safety. The Electronic Systems Safety program supports an engineering laboratory with safety test and system safety analysis capabilities to provide safety assistance to Electronic Systems Program and Acquisition offices. This program also updates safety requirements in Navy electronic standards, specifications, and publications. The Laser Safety Program maintains laser safety design standards and test and evaluation capability to assist in producing safe laser systems for the Fleet. Laser protective devices are evaluated for protection against friendly and enemy lasers; laser radiation hazard surveys are conducted afloat and ashore; laser safety training assistance is provided for all Navy; and laser safety publications are developed and promulgated to all Navy.

Navy Occupational Safety and Health (NAVOSH) - Is aimed at eliminating workplace hazards and training employees in safe work practices, thereby reducing work time injuries and equipment damage, increasing productivity and enhancing fleet readiness. This is accomplished by providing safety and occupational health training of safety personnel, supervisors and employees; safety inspections; salaries for safety officers and safety clerical assistance; protective equipment for personnel; safety signs, alarms and equipment; and safety modifications to machinery and buildings.

Integrated Logistic Support (ILS) Systems - This program supports the introduction of new fleet tactical communications equipment by providing the proper planning for all the elements of integrated logistics support. Included are planning for equipment implementation and installation, depot support, supply support, configuration management, software maintenance, training, documentation, other elements of ILS management, and project acquisition management support. This program also provides for the establishment of In-Service Engineering Agents (ISEA) for new equipment as it is being introduced, and also to monitor existing equipment to determine and provide corrections for problems as they arise.

INSURV (Board of Inspection and Survey) - SPAWARSYSCOM provides support to the Board of Inspection and Survey in accomplishing its mission to conduct acceptance trials of ships; service craft and aircraft; to inspect new ships and service craft for suitability for the purpose intended, and to make recommendations on their acceptance by the Navy; to conduct surveys recommending disposition of ships and service craft which are considered to be beyond economical repair and modernization; to periodically ascertain and report on the material condition and material performance capabilities of ships; and to make such other inspection and trials as may be directed by the Chief of Naval Operations (CNO). This program transfers from the Fleet Engineering Technical Services SAG in FY 1987.

Activity Group: Logistics Support Services (cont'd)

I. Description of Operations Financed (cont'd)

Air Station Installation - The Air Station Installation program provides electronic equipment support to 122 Navy and Marine Corps air activities worldwide through the Naval Air Traffic Control (ATC) and Air Navigation Aids and Landing Systems (NAALS) programs. NAALS surveys are conducted to determine the operational readiness and condition of shore-based electronic systems as well as conditions and situations which directly affect the effective utilization of the equipment. The program finances the planning, installation design, installation and engineering support of Tactical Air Navigation Aid (TACAN), Tactical Communication, Air Traffic Control Systems, and Fleet Air Control and Surveillance Facilities (FACSFAC). FACSFAC provides control and scheduling services to aircraft, ships, and submarines in offshore operating areas. Starting in FY 1985, funds are provided for installation of equipment in the Island Command Center (ICC) in Diego Garcia. Also included in this program is funding for support of fleet requirements for Shipboard Air Traffic Control (SATC), Automatic Carrier Landing Systems (ACLS), Navigation Systems and MK XII AIMS Identification Friend-or-Foe (IFF) Systems. SATC Centers provide identification of aircraft carrier radar systems that provide precise automatic control for final approach and landing. Navigation systems supported in this line are the OMEGA radio receivers (SRN-17, BRN-7, LTN-211, etc). Satellite-based radio navigational systems are used worldwide and are installed on nearly all surface ships and submarines. AIMS IFF is a DOD-directed tri-service program providing universal air traffic control radar beacon systems compatible with the National Airspace System, and is a secure identification system for military use.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

		FY 1986			FY 1987	
	FY 1985	Budget Request	Appro- priation	Current Estimate	Budget Request	Change
Standardization	1,873	4,032	4,013	3,648	3,773	125
Remote Sensors	2,345	6,820	6,815	5,944	3,862	-2,082
SSN-ICS	3,810	6,356	6,382	5,472	4,160	-1,312
Safety	596	529	530	577	575	-2
NAVOSH	270	290	298	270	269	-1
ILS	1,161	774	771	684	2,659	1,975
Inspection and Survey	-0-	-0-	-0-	-0-	956	956
Air Station Installation	<u>23,096</u>	<u>27,475</u>	<u>26,395</u>	<u>23,289</u>	<u>21,341</u>	<u>-1,948</u>
Total Logistics	33,151	46,276	45,204	39,884	37,595	-2,289
Support Services						

Activity Group: Logistics Support Services (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1986 Current Estimate		\$39,884
2. Pricing Adjustments		1,316
A. Stock Fund	(-12)	
1) Non-Fuel	-12	
B. Industrial Fund Rates	(125)	
C. Average Grade Reduction	(-41)	
D. Annualization of Civilian Health Benefits Costs	(-2)	
E. Other Pricing	(1,246)	
3. Functional Transfers		-770
A. Transfers In	(-770)	
1) Intra-Appropriation	747	
a) <u>Inspection and Survey (INSURV)</u> -		
Transfer of this program from the		
Contractor Technical and Maintenance		
Support Activity Group.		
B. Transfers Out	(-1,517)	
1) Intra-Appropriation	-1,517	
a) <u>SSN-Integrated Communications</u>		
<u>System (ICS)</u> - Program decrease is		
the result of a partial transfer to		
FBM Control System Communications,		
Budget Activity 1.		
4. Program Increases		6,124
A. Other Program Growth in FY 1987	(6,124)	
1) <u>Standardization</u> - Increase	2,606	
represents 23 additional Engineering		
Support Actions in support of 10		
Federal Supply Classes dealing with		
various obsolete and obsolescent		
electronic parts caused by diminishing		
manufacturing sources, and an increase		
of 797 SHARP Program Actions. (See		
performance criteria for detailed		
explanation).		

Activity Group: Logistics Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

Program Increases (cont'd)

2)	<u>Integrated Logistics Support (ILS) Systems</u> - Provides additional funds for the establishment of a depot to support new equipments scheduled to enter the fleet such as the OA-9122/SRC Selective Antenna Coupler Group and the AN/USQ-83 Programmable Data Set. Also will provide for the establishment and maintenance of a Field Maintenance Authority and Software Maintenance Activity for these equipments.	2,447
3)	<u>Air Station Installation</u> - Program provides increase for Fleet Area Control and Surveillance Facility (FACSFAC) support, due to completed installation of equipment at Diego Garcia, MK XII AIMS IFF (Shipboard) support, due to 4 additional equipments coming on-line, and increased level of support for navigation with less units to be performed.	862
4)	<u>INSURV</u> - Provides higher level of support for INSURV inspections resulting in quicker problem identification and resolution INSURV inspections.	209
5.	Program Decreases	-8,959
A.	Annualization of FY 1986 Decreases	(-158)
1)	Continued Implementation of Audit Savings	-158
B.	One-time FY 1986 Costs	(-499)
1)	<u>Integrated Logistics Support (ILS) Systems</u> - Completion of material purchases as a result of activation of depot in FY 1987.	-499
C.	Other Program Decreases in FY 1987	(-8,302)
1)	<u>Standardization</u> - Decrease will result in 189 fewer standards and specs, No qualifications/correlations, and no design approval requests to allow for other efforts to be accomplished in FY 1987.	-2,535

Activity Group: Logistics Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

Program Decreases (cont'd)

- |                                                                                                                                                                                                                                                                                                                                                               |        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 2) <u>Remote Sensors</u> - Decrease as a result of reordering of program efforts and a reduction of effort concentrated at Special Ammunition Storage sites and AA&E Storage Sites.                                                                                                                                                                           | -2,283 |
| 3) <u>NAVOSH</u> - Decrease will result in correction of 12 less Safety deficiencies.                                                                                                                                                                                                                                                                         | -6     |
| 4) <u>Air Station Installation</u> - Program decreases as a result of completion of Diego Garcia Island Command Center; 37 less ATC Management Systems; 30 less Landing Systems Installations; and 21 less Air Traffic Control Modernization efforts. Also, 2 less Air Navigation Aids Installations, decrease of one other ATC improvement, and 2 less ACLS. | -3,461 |
| 5) <u>Safety</u> - Decrease will result in one less laser safety working group technical assist visit, and reduction of the level of for each laser safety survey.                                                                                                                                                                                            | -17    |

6. FY 1987 President's Budget Request

\$37,595

III. Performance Criteria.

	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
<u>Standardization</u>			
Engineering Support Actions	422/ 198	432/ 203	455/ 223
Standards and Specifications	308/ 722	470/1,411	281/ 843
Qualifications/Correlations	332/ 688	282/1,236	0/ 0
SHARP Program Actions	0/ 0	0/ 0	797/2,707
Design Approval Requests	119/ 265	253/ 798	0/ 0
 TOTAL	 1,181/1,873	 1,437/3,648	 1,533/3,773

SHARP is the standardization and qualification testing of connectors, frames, back panels, electronic circuit board modules, power supplies and enclosures/cabinets to be used as standard parts for avionics and ship weapon systems procurement.



Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria.

	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
<u>Remote Sensors</u>			
Special Ammunition Storage (SAS) sites	1/ 643	1/1,110	1/1,000
SAS Upgrade	1/ 88	3/ 450	3/ 450
Arms, Ammunition and Explosive (AA&E) Storage Sites		7/2,274	1/ 481
Engineering Support/Integrated Logistics Support (ILS)	1,614	2,110	1,931
Intrusion Detection Systems (IDS) System Support			
TOTAL	2/2,345	11/5,944	5/3,862

Workyears

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
<u>SSN-ICS</u>			
(FY 85 average cost per W/Y = \$100K for all items except ISEA)			
Curriculum Development for Training Support	1.1	1.5	1.0
Field Maintenance Agency/Configuration Management (FY 85 Equip. Density = 808)	3.0	4.0	1.0
Repair and Maintenance Service for: Signal Distribution Systems (SDS); Frequency Standard Transfer Switch (FSTS)/Low Level Teletype Switch (SB-3917); Teletype Switch (OK-261); Density (FY 85 = 702); Sensor Interface Unit (SIU); and Data Terminal Set (DTS). (FY 85 Equip. Density = 146).	6.8	0	0
CCSIP Operations Support	3.0	2.5	2.5
Technical Support and Management Assistance (FY 85 Equip. Density = 848).	5.0	5.4	5.0

Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria.

	<u>Workyears</u>		
	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
<u>SSN-ICS (cont'd)</u>			
Software Life Cycle Support (SIU)	2.0	2.5	2.5
Antenna Technical Inspection Program	0.6	1.5	1.5
In-Service Engineering Agent (FY 85	8.2	13.5	10.8
Equip. Density = 3729 (FY 85 per			
M/Y Cost = \$86.8K)			
Antenna Technical Representatives	10.0	15.0	12.0
FY 85 Equip. Density = 3729)			
Mod. Test Equipment Support	0	3.0	3.0
EMI Installation Support	0	3.5	1.4
Com Spt (Video Tape; AN/WSC-3,	0	4.0	0
AN/BRR-3; Electronic Drive;			
Spectrum Analyzer)			
TOTAL W/Y	39.7	56.4	40.7
TOTAL FUNDING (\$000)	3,810	5,472	4,160

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	<u>Units/\$000</u>		<u>Units/\$000</u>		<u>Units/\$000</u>	
<u>Safety</u>						
Number of Electronic	1/	75	1/	55	1/	55
Safety Documents						
Produced or Revised						
Number of Evaluations	1/	7				
of Electronic Equipments						
Number of Laser Safety	5/	111	4/	90	4/	90
Surveys						
Number of Laser Safety	3/	39	3/	42	3/	42
Workshops						
Laser Safety Review	5/	45	5/	45	5/	45
Board System Reviews						
Laser Protective Device	1/	70	2/	122	2/	122
Evaluations						
Laser Safety	3/	94	2/	67	2/	67
Publications						
Laser Equipment Safety	4/	121	3/	120	3/	120
Evaluations						
Laser Safety Fleet	3/	28	3/	30	3/	30
Assist Visits						
Laser Safety Working	3/	6	2/	6	1/	4
Groups Technical Assist						
Visits						
TOTAL	29/	596	25/	577	24/	575

Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
<u>NAVOSH</u>			
Number of Safety and Health Inspections	8/ 150	8/ 150	8/ 150
Number of Supervisor and Employee Safety Courses	7/ 46	7/ 52	7/ 52
Number of Safety Officers Trained	7/ 21	7/ 21	7/ 21
Number of Safety Deficiencies Corrected	<u>80/ 53</u>	<u>68/ 47</u>	<u>56/ 46</u>
TOTAL	102/ 270	90/ 270	78/ 269

Integrated Logistics Support  
(ILS) Systems

Equipment (# Supported)	161/ 50		
Project/Acquisition Management Support	2.4WY/ 268	2.0WY/ 185	2WY/ 185
Depot Activation	1/ 828		1/1,100
Software/Tech Maint Act/ Fleet Maint Support	1/ 15		2/1,374
Material Purchases		/ 499	
TOTAL	1,161	684	2,659

Inspection and Survey  
(INSURV)

Number of INSURV responses provided

205/ 956

Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
<u>Air Station Installation</u>			
Air Traffic Control	90/ 7,603	105/ 5,350	84/ 4,422
Modernization			
Air Navigation Aids	5/ 1,304	30/ 1,830	28/ 1,760
Installation			
Landing System	78/ 1,400	66/ 2,023	36/ 900
Installation			
Fleet Area Control and	5/ 1,772	6/ 3,816	6/ 4,597
Surveillance Facility			
Diego Garcia Island Command	1/ 100	1/ 50	0/ 0
Center Installation			
ATC Management System	62/ 2,964	53/ 2,958	16/ 2,114
Other ATC Improvements,	91/ 4,101	63/ 2,432	62/ 2,463
Equipment ECPs, Mods, etc			
MK XII AIMS IFF (Shipboard)	629/ 1,076	630/ 1,313	634/ 1,452
Navigation	144/ 840	136/ 814	127/ 916
Automatic Carrier Landing	39/ 1,936	38/ 2,703	36/ 2,717
System (ACLS)			
TOTAL	1,144/23,096	1,128/23,289	1,029/21,341

IV. Personnel Summary. NONE

DEPARTMENT OF THE NAVY  
OPERATION AND MAINTENANCE, NAVY

Activity Group: Industrial Preparedness  
Budget Activity: VII - Central Supply & Maintenance  
Claimant: Space and Naval Warfare Systems Command

I. Description of Operations Financed.

Manufacturing Technology - The industrial preparedness funds are used to support travel requirements to contractor's plants to enlist their support in the program, gather required data, verify industrial preparedness measures suggested by the contractor, or to negotiate mobilization and surge schedules for inclusion in letter contracts. A portion of the funds are required for software support and leased communications lines to integrate the SPAWAR Industrial Preparedness effort into the Systems Commands' central ADP system. The functions financed by these funds are travel, lease costs for a communications line to a central computer at the Washington Navy Yard and manuals for the same.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

	FY 1985	Budget Request	FY 1986 Appropriation	Current Estimate	FY 1987 Budget Request	Change
Manufacturing Technology	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>37</u>	<u>37</u>
Total Industrial Preparedness	0	0	0	0	37	37

Activity Group: Industrial Preparedness (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1986 Current Estimate	\$0
2. Program Increases	37
A. Other Program Growth in FY 1987 (37) Increase will allow for 24 on-site visits (29); and purchase of additional standard software to be used for the transfer of all Industrial Preparedness data on to a central data base (8).	
3. FY 1987 President's Budget Request	\$37

III. Performance Criteria.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	<u>Units/\$000</u>	<u>Units/\$000</u>	<u>Units/\$000</u>
Per Diem (Days/Total \$)	0/0	0/0	142/11
Travel (Trips/Total \$)	0/0	0/0	24/18
Other Purchases (\$)	0/0	0/0	/ 8
TOTAL	0	0	37

IV. Personnel Summary - None

DEPARTMENT OF THE NAVY  
OPERATION AND MAINTENANCE, NAVY

Activity Group: Engineering and Support Services  
Budget Activity: VII - Central Supply & Maintenance  
Claimant: Space and Naval Warfare Systems Command

I. Description of Operations Financed.

Technical Publications - Provides for adequate and accurate technical documentation for installation, training, operation, and maintenance of electronic systems for the Fleet and other users. The primary objective is to provide the best possible manuals with initial deliveries of every SPAWAR hardware item and to maintain adequate stocks in the supply system of the approximately 11,000 SPAWAR publications. The secondary objective is to correct any publications problems or deficiencies which may arise that reduce Fleet readiness.

Reliability and Maintainability - Provides technical surveillance of contracts to ensure that equipments are delivered without deficiencies. Selected systems, newly introduced into the Fleet, are evaluated to determine if design requirements are being met or to identify problems and develop corrective actions. Additionally, SPAWAR is the DOD designated preparing activity for yearly review and update of Military Standards for reliability testing, growth and thermal design. This program contains a requirement to maintain the integrity of Reliability Initiatives and Workmanship Screening.

Electronic Test and Repair

Test Capability Development - This program provides: (1) requirement analysis of Navy test requirements to identify those parameters which need to be tested; (2) in-depth analysis of actual fleet and support activity requirements; (3) review of existing automatic test equipment test program sets and units under test documentation. This program also addresses the feasibility of enhancements, if required, and research in graphic forms and procedures to make the information more easily and rapidly comprehensible to the user.

Shore 2M Program - This program is designed to provide management and technical support for the development and maintenance of a viable 2M repair capability at approximately 168 shore sites not presently covered by NAVSEA. The program covers (1) the procurement of a basic 2M station for each site; (2) the development of a certification /recertification capability using Contract Engineering and Technical Support (CETS) personnel; (3) a site equipment analysis capability to enable the prediction of repair piece part requirements; (4) the development and installation of a necessary repair piece part support capability for each site; and (5) development and implementation of a data collection/reduction capability.

IMA Support Development Program (IMASDP) - This program is designed to develop a realistic I-level support capability for SPAWAR equipment. The thrust of this effort is directed towards in-service equipment. A team has

Activity Group: Engineering and Support Services (cont'd)

I. Description of Operations Financed (cont'd)

been established to implement the IMASDP, with membership drawn from CINCLANT/PAC, NAVSEA, NAVSUP and SPAWAR. The IMASD effort will be implemented on a system by system basis and consists of: (1) the identification of candidate systems; (2) the completion of maintenance and support requirements identification and level of repair analysis; (3) the development of a maintenance plan; (4) the development of an implementing operational logistic support plan (OLSP); (5) the completion of a reprovisioning effort by SPCC; and (6) providing follow-on maintenance management support to implement the OLSP.

DD Class Engineered Operating Cycle Program (DDEOC) - These ships will have their operating times extended from 36 months to approximately 60 months between overhauls. The change in maintenance strategy for the EOC ship classes is a shift from piece part repair to modular changeout. Changed out equipment and modules are shipped to expanded rework facilities for screening and refurbishment and subsequently returned to a pool for issue to support follow on availability of other DDEOC ship classes.

Tactical Electromagnetic Program (TEMP) - Ensures readiness by providing a valid operational Electromagnetic (EM) Environment and the capability to monitor and assess this environment. This is accomplished through the following efforts; (1) operation of two specially equipped NKC-135 aircraft to simulate hostile Electronic Countermeasures (ECM); (2) commencing FY 1986, operation of the Fleet Electronic Warfare Support Group (FEWSG) command, control, communications (C<sup>3</sup>) aircraft (FEWSG C<sup>3</sup>) which provides jamming services similar to the NKC-135 plus C<sup>3</sup> for ORANGE FORCES during fleet training exercises; (3) operation, maintenance and overhaul of Fleet Electronic Warfare Support Group (FEWSG) simulators, vans and ECM jammers; (4) provides technical advice and acquisition management support for the NATO Multi-Service Electronic Warfare Support Group (MEWSG); (5) provides repair and maintenance of fleet simulators and podded jammers used for training and tactical contingencies; (6) provides ECCM handbooks for specific ship classes based upon the ship's radar suite; and (7) maintenance of a master emitter data base at Electronic Intelligence (ELINT) Centers, generation of all electronic warfare libraries, and the coordination effort required with fleet intelligence centers.

Electromagnetic Compatibility/World Administrative Radio Conference (EMC/WARC) - Provides funding for: (1) Fleet EMC Support Program analysis and development of solutions for Fleet EMI (Interference) problems involving SPAWAR Systems; (2) Acquisition E<sup>3</sup> (Electromagnetic Environment Effects) technical review, analysis and recommendations in EMI control of SPAWAR systems acquisitions; (3) E<sup>3</sup> Program support of CNO Executive Boards, Flag boards, and reports to OPNAV; Technical evaluation/review of reports and other support of E<sup>3</sup> EMI program; (4) WARC support involving technical evaluation of impact of special WARCs and development of technical alternatives for Navy requirements, plus VHF frequency realignment for regions of U.S. and possessions includes implementation support; (5) E<sup>3</sup> Training Seminar to



Activity Group: Engineering and Support Services

I. Description of Operations Financed (cont'd)

Electromagnetic Compatibility/World Administrative Radio Conference (cont'd)

train acquisition, lab, and inspection personnel for better acquisitions -- E<sup>3</sup> Newsletter to increase EMI awareness and provide guidance to Navy personnel--updating the EMI NTP--development of training modules--development of self-help films/tapes; (6) Shore Support in conducting EMI/RADHAZ survey by various SPAWAR field activities, and implementation of new RADHAZ criteria.

Submarine Surveillance Equipment Program (SSEP) - Provides funding for the required life-cycle support of many varied electronic support measures and data collection equipments assigned for nuclear attack submarines. This funding provides nuclear attack submarines with the capability to detect, track, identify, and analyze the activities of foreign and threat military systems, and to provide direct tactical support to deployed submarines for quick reaction to threat situations.

Cover and Deception - Detailed data on the following equipments, subsystems and systems is of higher classification and will be provided as required. This line item provides for direct support of active fleet electronic warfare operations. Equipments, subsystems, systems and functions supported by this line item are:

Shipboard Cover and Deception (SCD) - A configuration of specialized equipments, subsystems, and systems which collectively provide Fleet Commanders with the capability to deceive and/or disrupt adversary operations.

Offboard Cover and Deception (OCD) - A configuration of specialized expendable air and/or surface deployable buoys to support ocean surveillance and C<sup>3</sup> and designated shore support.

Portable Electronic Warfare Support Measures (ESM) Equipment/Systems - Portable ESM consists of the following 2 types of support:

Crypto Direct Support (CSD) - The systems, subsystems, and support equipments with this line item consist of portable systems centrally located at forward staging areas for deployment on Navy Combatants and Amphibious ships, by direction of the Fleet CINC, on a mission-to-mission basis to provide tactical Electronic Warfare Support Measures (ESM) support to the embarked Commander in Quick Reaction Mode relative to mission area requirements.

Tactical Cryptologic Support (TCS) - The systems, subsystems, and support equipments within this line item are permanently installed at worldwide Navy ashore Signal Intelligence (SIGINT) sites and provide tactically significant technical cryptologic data support to installed/deployed cryptologic equipments/systems on Navy combatants and Amphibious ships.

Activity Group: Engineering and Support Services

I. Description of Operations Financed (cont'd)

Naval Information Processing System (NIPS) - This system includes intelligence equipment installed in the intelligence centers of the Aircraft Carriers (CV) the Amphibious Command Ships (LCC) the Amphibious Assault Ships (LHA) and four Navy shore commands. The purpose of NIPS is to process, analyze, display and disseminate intelligence data to the ship and the Battle Group to support Naval operations. The equipments comprising the NIPS are installed as 43 different suites of equipments made up of the AN/USQ-34(17); the AN/SSQ-64 (2); the AN/SYQ-9 (6); and the AN/SXQ-8 (18). Included with these systems is a National and Navy Intelligence Data Base and computer programs to operate the systems. The inventory of major equipments that comprise NIPS is very extensive, ranging from data processing equipment procured in the early 1970's to photographic equipment and a major closed circuit television distribution system.

Electronic Warfare Support. Detailed data on the following equipments, subsystems and systems is of higher classification and will be provided as required. This line item provides for direct support of active fleet electronic warfare operations. Equipments, subsystems, systems and functions supported by this line item are:

OUTBOARD - This line item supports Tactical Cryptologic equipments/systems deployed on Navy combatants. These equipment/systems provide the operational commander with a real time passive capability.

COMBAT DF - This line item supports Tactical Cryptologic equipments/systems deployed on Navy combatants and is a reduced, current technology system.

CSSC/CCSS - The Cryptologic Combat Support Console and Cryptologic Combat Support System (AN/SSQ-93) are installed on CV/CVN and non-OUTBOARD/COMBAT DF platforms.

Surface Electronic Warfare - The equipment/systems within this line are radar and anti-ship missile (ASM) warning and defense systems which provide the operational commander with a real time passive capability to detect, locate, track and target surface and airborne radars and missiles, and to defend the task force by electronic means from electronic and/or IR guided ASM's. Systems within this category are (a) the AN/SLQ-17A(V)2 which provides both passive area surveillance and active electronic defense for CV/CVN against simultaneous multi-threat, multi-axis anti-ship missile attack, (b) AN/WLR-1H which is a passive radar surveillance receiver for CV/CVN which complements the AN/SLQ-17 in search and track for threat radars and missiles, (c) Anti-Ship Missile Decoy (ASDM) system which is a family of ASM decoys and launching equipment to counter the ASM threat, (d) MUTE (AN/SSQ-82) which is a shipboard monitor and control system, (e) AN/SLQ-20 which is higher classification ECM deception set of equipment, (f) AN/SLA-10 which is a blander group used to disable selected countermeasures receivers to prevent reception of transmitted signals, and (g) the AN/WLR-1 which includes band 10 tuners and AN/ULQ-6 variants. Funds provide for in-service support and SPAWAR Field Activities and contractor engineering and technical services, installation and deinstallation planning and support aboard USN surface ships; logistics support; system alignment/calibration during import periods;

Activity Group: Engineering and Support Services

I. Description of Operations Financed (cont'd)

hardware and software configuration control and maintenance; fleet failure analysis hardware and software ECP implementation and documentation updates and maintenance.

Automatic Data Processing (ADP) Security - Provides the capability to assure that Navy ADP systems, which process, store or use classified or sensitive business data and produce sensitive output, will, with reasonable dependability, prevent deliberate or inadvertent access to sensitive material by unauthorized persons and unauthorized manipulation of the computer and its associated devices. ADP security inspection teams design generalized test and evaluation procedures, modify them to provide a site specification plan, and conduct the analysis and evaluation of each ADP system. Team personnel provide training and guidance to operational personnel; a risk assessment of operational systems and the information necessary to correct deficiencies; and assistance to operational personnel and systems developers in obtaining system accreditation.

Inspection Testing - Test and evaluation of electronic systems and materials is performed at independent government test agencies to include: qualification tests on manufacturer's samples to determine compliance with the specification requirements and to establish the item on a Qualified Products List; special testing of failed material or intelligence items to determine serviceability of items in the supply system; pre-award surveys; and verification of production line items versus specifications. It further involves the analysis of master test plans to determine that planned testing will be necessary and sufficient.

General Purpose Electronic Test Equipment (GPETE) Technical Operations - Provides the engineering and technical support necessary to resolve technical and management problems associated with test, measurement and diagnostic equipments. This effort will enhance the standardization of GPETE equipment; reduce inventory; prevent redundancy; establish efficient repair cycles; maximize utilization through proper distribution; reduce excess GPETE items; eliminate obsolete and uneconomical repair to items; and validate requirements for initial outfitting and for replacement items.

Test and Monitoring Systems (TAMS) - In executing the lead SYSCOM functions for TAMS, the following test and monitoring system effort is provided: (1) Establishing policies, procedures and techniques for the acquisition and application of automatic testing. (2) Conducting weapon system acquisition reviews to assure proper application testing and METCAL screen acquisitions of Automatic Test Equipment (ATE), revising the ATE acquisition guide for project offices and providing consulting services to various acquisition and project offices and their contractors. In addition, the TAMS program represents the Navy on the Joint Logistics Commanders Panel on Automatic Testing, which is a Joint Services Panel, and the NSIA Automatic Testing Committee. (3) Represents the Navy on the JLC Joint Technical Coordinating Group for Metrology and Calibration (JTCC/METCAL), and provides direction to the Calibration Coordinating Group (CCG) and NBS engineering and technical projects. (4) Advanced Testing Technology (ATT) includes planning, monitoring and coordinating the Navy's advanced testing technology programs.

Activity Group: Engineering and Support Services

I. Description of Operations Financed (cont'd)

(5) Training and education includes developing and conducting a number of automatic testing and related educational programs.

Maintenance Engineering - This program has major responsibilities for a portion of the Detection, Action and Response Technique (DART) Program which is a coordinated priority effort for identification and expeditious correction of the most serious shipboard equipment problems affecting fleet material readiness. This program also finances the implementation and management of the following efforts: (1) ashore electronic Planned Maintenance System (PMS) program and the Nomenclature Assignment Effort; (2) maintenance concepts to include level of repair, supply support, provisioning guidance, allowance list development, production liaison for major equipments and systems, and development of corrections for equipment deficiencies; (3) repair management of electronic material and quality control of the repaired product; (4) depot maintenance interservice support agreements; and (5) intensive in-service engineering support.

Other Engineering Services - Provides specialized engineering/technical support to enhance the operational readiness of fleet and shore based systems and equipments by providing improved reliability. This effort corrects system and equipment deficiencies including technical documentation; improves configuration and management control; extends both the useful military life and mean time between failures within the equipment's current performance envelope, develops and implements systems level tests, maintenance procedures post-installation system testing for new construction and active fleet ships. The Navy has requirements to provide major technological upgrades to its aging shipboard EXCOMM systems in the next decade; and to improve its EXCOMM systems support to the Fleet.

Activity Group: Engineering and Support Services

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

		FY 1986			FY 1987	
	FY 1985	Budget Request	Appro- priation	Current Estimate	Budget Request	Change
Technical Publications	3,280	2,589	2,575	2,507	6,902	4,395
Reliability & Maintenance	549	1,056	1,051	561	534	-27
Electronic Test & Repair	3,542	4,630	4,703	3,842	3,767	-75
TEMP	12,821	16,912	16,842	15,637	17,216	1,579
EMC	5,022	6,433	6,416	6,139	6,139	0
SSEP	8,105	11,802	11,856	8,366	8,230	-136
Cover & Deception	3,462	2,551	2,568	2,520	2,954	434
Portable ESM	2,777	2,814	2,826	2,731	3,205	474
NIPS	2,472	2,825	2,856	2,593	2,375	-218
Electronic Warfare	9,437	12,170	12,169	9,577	9,008	-569
ADP Security	1,080	1,358	1,378	1,156	811	-345
Inspection Testing	580	628	630	583	547	-36
GPETE Tech Operations	1,028	1,748	1,752	1,097	1,045	-52
TAMS	3,094	1,926	1,917	3,093	2,525	-568
Maintenance Engineering	8,888	11,556	11,705	11,195	18,889	7,694
Other Engr Services	6,053	3,448	3,461	2,829	2,688	-141
Total, Engineering and Support Services	72,190	84,446	84,705	74,426	86,835	12,409

Activity Group: Engineering and Support Services (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1986 Current Estimate		\$74,426
2. Pricing Adjustments		2,109
A. Stock Fund	(-144)	
1) Fuel	-187	
2) Non-Fuel	43	
B. Industrial Fund Rates	(328)	
C. Average Grade Reduction	(-117)	
D. Annunlization of Civilian Health Benefits Costs	(-6)	
E. Other Pricing Adjustments	(2,048)	
3. Functional Program Transfers-		-58
A. Transfers out	(-58)	
1) Intra-Appropriation - To Budget Activity 9, CNO to pay for SLUC reimbursable costs.	-58	
4. Program Increases		15,613
A. Other Program Increases in FY 1987	(15,613)	
1) <u>Technical Publications</u>	4,292	
The growth of this program in FY 1987 establishes the Engineering Data Maintenance program. This is in accordance with direction to automate data repositories to improve the acquisition, storage, update, and retrieval of reprocurment and technical data. Other increases include 660 comment sheets; 658 reprints and 700 engineering technical data packages maintained. These increases will support the goal of eliminating the backlog of deficient technical manuals by FY 1991.		
2) <u>TEMP</u>	2,261	
Increase provides for (a) one additional NKC-135 engine overhaul required for safety purposes, (b) depot expansion associated with new NKC-135 aircraft, and (c) provides for contract operation and maintenance cost associated with an additional 285 flight hours for the FEWSG C3 aircraft.		
3) <u>Cover and Deception</u>	344	
<u>Integrated Cover and Deception (ICAD)</u> Increase will provide for hardware and software support of the AN/SLQ-34(V1), and carry-on (VANS) disruption system.		

Activity Group: Engineering and Support Services (cont'd)

B. Reconciliation of Increases and Decreases.

4) Portable ESM (PESM)

387

Increase in funding will provide for hardware support of the Cryptologic Direct Support VANS, Carry-on Special Intelligence Communications, and Tactical Cryptologic Support Field Training Systems.

5) Maintenance Engineering

7,701

BOSS:

Boss program direction emphasizes increased breakout of spares procurements to competition. To accomplish this task, breakout reviews are conducted on Tech Data Packages (TPD) assembled for projected spares buys. The total number of reviews will increase from 998 to 2310. of these quantities, 319 are straight forward reviews requiring little change. Other TPDs reviewed will require enhancement which consists of improving existing data, acquiring additional data, reverse engineering, or value engineering effort. The number of enhancements required or funded will increase by 753 and surveillance reviews by 240. Additional emphasis will also be placed on acquiring good technical data initially to reduce the expensive enhancement efforts which will result in an increase of engineering data review/acceptance from 1 system to 20 systems and an initial start-up drawing review and assignment of Acquisition Method Codes (AMC) from 0 to 20. Additional increase provides for prepositioning of technicians and pre-deployment grooming results. Acquisition method code assignments, by which replenishment parts are identified will increase by 240. (6,612)

Non-Boss (ACLS-DART): Increase reflects funding for pre-positioned technicians and pre-deployment grooming; Logistic Support Management represents a return to the level of support required by the fleet in FY 87. The increase in the SPN-43 Mods represents funding of one SPN-43 MTD in FY 1987. (1,089)

Activity Group: Engineering and Support Services

B. Reconciliation of Increases and Decreases (cont'd)

6) <u>Other Engineering Services</u>	177
RADHAZ surveys, which involve investigations of radiation hazards at Navy shore activities, and are required to ensure the safety of Navy personnel and civilians located in close proximity to Navy transmitter installations, will increase by 13.	
7) <u>Electronic Warfare Support</u>	451
Reflects increased software support to the AN/SLQ17A(V)2 Tactical Surface ESM Systems.	
5. Program Decreases	-5,255
A. Annualization of FY 1986 Decreases	(-286)
1) Continued implementation of audit savings of identified in FY 1986.	
B. Other Program Decreases in FY 1987	(-4,969)
1) <u>Reliability and Maintainability</u>	-49
The decrease reflects (a) the discontinuance of the workmanship screening program for evaluating the reliability of electronic modules processed through restoration activities, (b) suspension of the review/update of military standards for reliability testing, and (c) discontinuance of field activity support for human engineering.	
2) <u>Maintenance Engineering</u>	-237
Decrease reflects completion of three AN/SPN-42 Mods, 214 CASREP/3M reports not analyzed, 34 technical problems and beneficial suggestions not analyzed, and 25 failure analyses not evaluated.	
3) <u>Submarine Surveillance Equipment Program (SSEP)</u>	-329
- Decrease reflects reduced AN/BRD-7 hardware/software maintenance and management; reduced WLR-8 hardware/software support; reduced BLD-1 hardware and technical support; reduced WLR-1H hardware support; reduced WLQ-1 hardware/software maintenance and management support; reduced Radar Cross Section Reduction Support and Facilities Management Support; reduced EMSORT Vans and Aural Analysis Booths.	



Activity Group: Engineering and Support Services

B. Reconciliation of Increases and Decreases (cont'd)

Program Decreases (cont'd)

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 4) <u>Electronic Warfare Support</u>                                                                                                                                                                                                                                                                                                                                                                                                                     | -1,309 |
| Decrease reflects reduced hardware and software support to the AN/SLQ-17A (V)2 Tactical Surface ESM systems; reduced hardware support to the AN/WLR 1H receivers; reduced deployment support to the MK-34 and MK-33 Decoys; reduced hardware and software support to the AN/SLR-23 and AN/SYQ-8 systems; reduced hardware and software support to the CCSC/CCSS (AN/SSQ-93) systems; and reduced hardware and software support to the COMBAT DF systems. |        |
| 5) <u>NIPS</u>                                                                                                                                                                                                                                                                                                                                                                                                                                           | -266   |
| Decrease reflects reduced software support for the USQ-34/SYQ-64/SYQ-9 systems and a reduced level of installation support of the USQ-34/SYQ-9/SXQ-8/FIST systems.                                                                                                                                                                                                                                                                                       |        |
| 6) <u>ADP Security</u>                                                                                                                                                                                                                                                                                                                                                                                                                                   | -362   |
| Decrease reflects a reduction of 5 ADP tests and evaluations (150), 8 Technical assists (100), one workyear of technical support of labs (89), and 3 inspector general assists (23).                                                                                                                                                                                                                                                                     |        |
| 7) <u>Inspection Testing</u>                                                                                                                                                                                                                                                                                                                                                                                                                             | -59    |
| Decrease reflects 5 fewer special tests will be conducted. T&E master plans will be reduced by one.                                                                                                                                                                                                                                                                                                                                                      |        |
| 8) <u>GPETE Tech Ops</u>                                                                                                                                                                                                                                                                                                                                                                                                                                 | -90    |
| Decrease reflects reduction in the number of GPETE technical documentation packages by 9 and 1,000 GPETE items under procurement will not be tracked during the procurement cycle.                                                                                                                                                                                                                                                                       |        |
| 9) <u>TAMS</u>                                                                                                                                                                                                                                                                                                                                                                                                                                           | -683   |
| A decrease of one workyear will occur for each of the following efforts: Navy Automatic Testing, Test Technology Office and Information Center, Automatic Testing Guides and Guidance Documents, Manual Testing/METCAL Program and the Measure Central Data Base Facility. Calibration Consolidation studies will be reduced by one and the Joint Logistics Commander Training Course will be reduced by one.                                            |        |

Activity Group: Engineering and Support Services

B. Reconciliation of Increases and Decreases (cont'd)

Program Decreases (cont'd)

10) <u>Other Engineering Services</u>	-400
Decrease reflects reduced engineering support for External Communications (EXCOMM) antennas, reduced technical drawing validation, and reduced software support.	
11) <u>Electronic Test and Repair</u>	-187
Decrease reflects a reduction in the number of test program sets that are duplicated and distributed to fleet activities for required fleet maintenance support from 356 to 313.	
12) <u>TEMP</u>	-998
Reflects decrease in AN/ALQ-167 and AN/AST-4 fleet simulators/pods repaired and maintained.	

6. FY 1987 President's Budget Request.	\$86,835
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Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria.

	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
<u>MAINTENANCE OF TECHNICAL PUBLICATIONS</u>			
Quality Assurance			
In Process Reviews	25/ 45	25/ 45	84/ 133
Verifications	20/ 37	50/ 117	50/ 79
Manuscript (desk-top) Reviews	527/ 962	527/ 953	527/ 833
Updates			
Manuscripts updated	164/ 298	164/ 297	164/ 259
User Comment Sheets Processed	389/ 709	500/ 910	1,160/1,833
Printing and Replenishment			
Manuscript reprint actions	675/1,229	1,025/ 185	1,683/2,658
Engineering Data Maintenance			
Technical data package			700/1,107
TOTAL FUNDING	3,280	2,507	6,902

RELIABILITY & MAINTAINABILITY

Contract Data			
Requirements List			
deliverables evaluated	285/ 359	130/ 200	275/ 334
Workmanship Screening Modules	0	920/ 130	0
Reliability Initiatives Workyears	3.0/ 190	3.0/ 190	3.0/ 200
Military Standards Update Workyears	0	1.0/ 14	0
Human Engineering Support	0	1.0/ 27	0
TOTAL FUNDING	549	561	534

ELECTRONIC TEST AND REPAIR (ATE)

ATE Portion:

Test Programs Sets (TPS) developed	8/ 200	0	0
Requirements Analysis/Standardization	3/ 195	9/ 630	8.5/ 655
Translate TPS	19/ 475	1/ 30	1/ 30
Duplicate TPS	6/ 6	356/ 359	313/ 314
SUBTOTAL ATE	876	1,019	999

Shore 2M Program

CETS Support	(# myrs)	0.3/ 26	0.3/ 28	0.3/ 28
SUBTOTAL FUNDING		26	28	28

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria.

	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
<u>IMA Program Management</u>			
Program Field Act Mgmt Support (# myrs)	1.8/ 70	1.7/ 65	1.5/ 60
Program Mgmt Consult Support (# myrs)	1.0/ 100	0.8/ 87	0.7/ 87
MPA/LOR Analysis Support (# pgms)	1.0/ 63	2.0/ 100	2.0/ 100
SUBTOTAL IMA	233	252	247
<u>DDEOC</u>			
Restoration of Change-out Equipment	211/1,587	275/2,169	269/2,428
Technical Repair Stands developed	12/ 459	2/ 96	0/ 0
Ship Avail Equip Change out			
Coordinations	31/ 78	25/ 65	26/ 65
Validation & Installation of TPS	5/ 12	0/ 0	0/ 0
CMP Recommendation Reviews	5/ 13	8/ 22	0/ 0
Weapon Sys File Updates	15/ 258	10/ 191	0/ 0
SUBTOTAL DDEOC	2,407	2,543	2,493
TOTAL ETR	3,542	3,842	3,767
<u>Tactical Electromagnetic Program (TEMP)</u>			
NKC-135			
Flight hours	1,070	1,070	1,070
Fixed Costs (\$000)			
Contract Operation & Maint	6,480	7,000	7,000
Engine Overhauls	2/ 150	2/ 300	3/ 450
Planned Depot Maint	550	0	600
Operating Costs (\$000)			
*Fuel	2,297	1,982	1,992
AF Material Support	463	527	552
FEWSG C <sup>3</sup> Aircraft			
Flight Hours	0	100	385
Fixed Costs (\$000)			
**Contract Op & Maint	0	844	989
Operating Costs (\$000)			
*Fuel	0	200	778

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria (cont'd)

Tactical Electromagnetic Program (TEMP) (cont'd)

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	<u>Units/\$000</u>		<u>Units/\$000</u>		<u>Units/\$000</u>	
FEWSG Repair & Maintenance						
Simulation Vans	8/	271	8/	668	8/	749
Electronic countermeasure jammers (Units)	27/	80	92/	272	118/	350
Simulator Pods (ALQ-167/AST-4)	14/	150	14/	150	14/	150
ALQ-170/C&D Simulators	2/	60	11/	330	20/	600
Chaff Dispensers	29/	240	31/	256	31/	256
AN/DLQ-3 (Units)	16/	270	16/	270	16/	270
MEWSG	1/	120	0/	0	1/	10
Eng/Tech Svcs (\$000)						
Fleet Sim/Pod Rep. & Maint.						
AN/ALQ-167 (Units)	51/	500	62/	600	0/	0
AN/AST-4	22/	239	25/	290	0/	0
Advanced ECCM Manuals	0/	0	0/	0	10/	170
EW Reprogrammable Library						
Pacific Support	1/	100	1/	175	1/	175
Atlantic Support	1/	104	1/	175	1/	175
Mediterranean Support	1/	60	1/	175	1/	175
Data Base Support	1/	300	1/	580	1/	757
Software System Support	1/	387	1/	843	1/	1,018
TOTAL TEMP FUNDING		12,821		15,637		17,216

\* - NKC-135 Aircraft consume 2,200 gal/hr based upon FY 1984 data. FEWSG C3 aircraft estimate consume 2,380 gal/hr due to additional drag on airframe.

\*\* - Contractor maintenance for partial year. Cost includes aircraft material support not available in USAF supply.

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1985</u> <u>\$000</u>	<u>FY 1986</u> <u>\$000</u>	<u>FY 1987</u> <u>\$000</u>
<u>EMC/WARC</u>			
Fleet EMC Support Program:	2,107 (86 probs)	2,154 (144 probs)	2,482 (158 probs)
Acquisition E <sup>3</sup>	469 (73 acqs)	782 (150 acqs)	795 (150 acqs)
E <sup>3</sup> Program Support	200 (2 CEB)	200 (2 CEB)	100 (1 CEB)
Technical Evaluation Review	381 (40M prog)	683 (54M prog)	715 (58M prog)
On site assessment of EMI program	125 (6 Eng)	35 (15 Eng)	35 (10 Eng)
WARC Support	232 (3spec WARC)	220 (2spec WARC)	290 (3spec WARC)
VHF Frequency Realignment	125 (1 area)	300 (2 areas)	260 (1 areas)
E <sup>3</sup> Training Seminars/self-help films	299 (30) (Sessions)	462 (46) (Sessions)	355 (37) (Sessions)
E <sup>3</sup> Newsletter	29 (3 issues)	50 (4 issues)	37 (3 issues)
Update EMI NTP	65	60	60
Shore Support	990 (106)	1,193 (121)	1,010 (100)
# of surveys	<u>(surveys)</u>	<u>(surveys)</u>	<u>(surveys)</u>
TOTAL FUNDING	5,022	6,139	6,139

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria (cont'd)

	FY 1985 Units/\$000	FY 1986 Units/\$000	FY 1987 Units/\$000
<u>SSEP</u>			
Digital Receiver (AN/BRD-7)	114/ 0	114/ 0	114/ 0
FMA Support (Hardware)	114/ 185	114/ 200	114/ 125
Maintenance Software Support	114/ 0	114/ 100	114/ 125
Management Support	114/ 50	114/ 100	114/ 105
Sub-surface Tactical ESM (WLR-8)	40/ 0	41/ 0	41/ 0
FMA Support (Hardware)	40/ 200	41/ 259	41/ 259
LCM Hardware Maintenance	40/ 50	41/ 75	41/ 75
Management Support	40/ 50	41/ 100	41/ 100
Navy Early Supply Support	40/ 0	41/ 5	41/ 5
Interferometer DF (BLD-1)	2/ 0	5/ 0	5/ 0
FMA Support (Hardware)	2/ 100	5/ 105	5/ 105
FMA Technical Support	2/ 100	5/ 105	5/ 110
Maintenance (Hardware)	2/ 50	5/ 0	5/ 0
Management Support	2/ 50	5/ 50	5/ 55
Navy Early Support	2/ 0	5/ 5	5/ 5

The growth in program management funding is additional funding to support part of the required Follow-on Operational Test and Evaluation (FOT&E) planned in FY87.

Sub-surface ESM Receiver (WLR-6)	10/ 0	6/ 0	6/ 0
FMA Support (Hardware)	10/ 540	6/ 275	6/ 170
Management Support	10/ 90	6/ 90	6/ 70
Navy Early Supply Support	90/ 0	0/ 0	0/ 0
Sub-Surface ESM Receiver (SNAPPER)	15/ 0	15/ 0	15/ 0
FMA Support (Hardware)	15/ 585	15/ 130	15/ 130
EHF/IFM Hardware Support	15/ 150	15/ 80	15/ 80
Band-10 Tuner	38/ 0	38/ 0	38/ 0
FMA Support (Hardware)	38/ 50	38/ 50	38/ 50
Surveillance Receiver			
SSN-594 Upgrade (WLR-1H)	9/ 0	9/ 0	9/ 0
FMA Support (Hardware)	9/ 200	9/ 225	9/ 225
Navy Early Supply Support	9/ 0	9/ 5	9/ 0
Digital Surveillance Receiver (WLQ-4)	34/ 0	40/ 0	43/ 0
FMA Support (Hardware)	34/1,953	40/2,100	43/2,100
Software Maintenance	34/1,317	40/1,500	43/1,500
Management Support	34/ 35	40/ 70	43/ 96
Navy Early Supply Support	34/ 5	40/ 8	43/ 8

(Digital Surveillance Systems (WLQ-4) - The system inventory increases in each of FY 1986 and FY 1987 reflect the delivery of the final group of systems procured for installation aboard the SSN-6f7 class nuclear submarines.)

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria (cont'd)

SSEP (cont'd)

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	<u>Units/\$000</u>		<u>Units/\$000</u>		<u>Units/\$000</u>	
Radar Cross Section Reduction						
FMA Support (Hardware)	490/	300	500/	364	510/	364
Headwindown Cleaner/Applicator						
FMA Support (Hardware)	10/	50	10/	75	10/	50
Emitter Classification Units						
FMA Support (Hardware)	20/	15	20/	15	20/	15
SSEP Pooled Equipment						
Facilities Management and Support	152/	600	375/	650	380/	673
Maintenance (Hardware)	152/	500	375/	575	380/	555

(SSEP Pooled Equipment - This reflects the normal increase of special purpose test equipment procured in BA 2 for use by the Submarine Surveillance Equipment Program Support Facilities in direct support of high priority special missions of national significance.)

Sub-surface ESM Receivers (WLR-1G)						
FMA Support (Hardware)	64/	150	64/	150	64/	150
Electromagnetic Readiness Tester						
(EMSORT Vans)						
FMA Support (Hardware)	4/	50	4/	100	4/	125
Aural Analysis Booths						
Refurbishment (Hardware)	4/	130	4/	200	6/	200

(Aural Analysis Reproduce Stations - This procurement represents upgrading a vitally needed resource at each of the two SSEP Support Facilities in support of the ACINT of data by submarines on special operations. This facility currently does not have the capability to screen and analyze data coming from the newer AN/BQH-5(V)4 Data Gathering Sets.)

Radio Detection finder (BRD-8)						
FMA Support (Hardware)	14/	300	14/	300	14/	300
BLA-4 Antenna Systems						
FMA Support	46/	175	46/	200	46/	200
Test Facility Operation	46/	75	46/	100	46/	100
SSEP TOTAL FUNDING		8,105		8,366		8,230



Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria (cont'd)

Integrated Cover and Deception (ICAD)

	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
Shipborne Cover and Deception			
AN/SLQ-34(V1)	6/ 570	6/ 183	6/ 194
AN/SLQ-34(V2)	37/ 0	37/ 183	37/ 250
AN/SLR-22	30/ 0	30/ 98	30/ 100
AN/SLR-33	5/ 561	7/ 268	7/ 350
AN/SSQ-74 Vans	6/1,197	6/1,099	6/1,103
Off Board Cover and Deception			
C&D Scenario Generator	5/ 840	5/ 340	5/ 440
RAдар Jammer I (STFTG)	65/ 294	65/ 80	65/ 100
PTD ODDS	0/ 0	6/ 73	6/ 97
HF Communications Simulator	0/ 0	50/ 0	50/ 0
Radar Jammer II (MTFTG)	0/ 0	65/ 0	65/ 0
E/F Band Simulator	0/ 0	50/ 0	50/ 0
Standard Flight Body	0/ 0	65/ 98	65/ 160
Standard Battery	0/ 0	50/ 98	550/ 160
AN/SLQ-20			
TOTAL FUNDING	3,462	2,520	2,954

PORTABLE ESM

a) Cryptologic Direct Support

VANS

Quick	12/ 0	12/ 97	12/ 73
OICS	4/ 0	4/ 97	4/ 73
PESM	5/ 101	7/ 48	7/ 49
FES Systems	0/1,082	17/ 193	17/ 156
AN/SSQ-80(V4)	0/ 27	1/ 314	2/ 243
TACC Systems	0/ 0	5/ 290	8/ 350
AN/SSQ-80(V1)	37/ 255	37/ 578	37/ 389
AN/SSQ-80(V2)	37/ 320	37/ 482	37/ 407
ASSURE II	1/ 42	1/ 0	1/ 39
Carry-on SI Communications	16/ 38	56/ 121	56/ 112
MUSIC	3/ 7	6/ 86	6/ 97
HF Receivers	0/ 93	0/ 0	20/ 146
SSES Ancillaries	85/ 340	12/ 48	0/ 0
Items Under 900K	0/ 0	14/ 39	
Tactical Cryptologic Support			
Field Training Systems	6/ 216	11/ 48	16/ 394
MSTDF	1/ 215	1/ 193	5/ 502
Teletype Replacement	70/ 41	70/ 97	90/ 175

TOTAL FUNDING	2,777	2,731	3,205
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Activity Group: Engineering And Support Services (cont'd).

III. Performance Criteria (cont'd)

Naval Information Processing System (NIPS) - The funds support the efforts of people located at three Naval facilities in their role of fleet support to the NIPS. The operations financed are: (1) computer program maintenance with documentation, (2) intelligence data base maintenance, (3) contractor and government engineering and technical services, (4) installation and de-installation of equipment on LCC's, CV's, LHGA's and shore commands, (5) repair of equipment, (6) hardware software and documentation configuration control, (7) facility operation and maintenance of the three engineering activity computer systems. The FY 87 funds will be used as set forth below:

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	<u>Number of Equipments Supported</u>		
<u>NIPS</u>			
OA-4547A/USQ-34 Plotter	2	2	5
AS-27A Analysis System	18	20	20
TD-1194 Display System	39	40	40
IP-1243 Keyboard Terminal	119	121	121
TT-624 Teleprinter	95	98	98
RD-358 Tape Units	28	29	29
MU-602 Extended Memory	20	20	20
AN/USH-26 Cartridge Magnetic Tape Unit	19	19	19
AN/UYH-2 Disk Memory Set	50	51	51
AN/UYK-20 Computer	43	44	44
CP-642B Computer	38	38	38
AR-155A Reader/Printer	33	33	33
AN/UYK-48 Analytic System	22	24	24
AN/UYK-7 Computer	7	8	8
SB-3495 Switch	7	8	8
OA-7984 Punch Paper Tape Unit	28	28	28
SA-1722/UYK Switch	7	8	8
AN/UYQ-23 Display Console	55	69	79
AN/UYK-43 Computer	0	1	1
RD-397 Printer/Punch	1	2	3
SA-1816/UYK Switch	9	10	10
PT-533 Graphic Plotter	2	2	2
RD-294 Magnetic Tape Unit	19	19	19
RO-280 Line Printer	22	22	22
AN/SXQ-8 CCTV	22	22	23
EH-38 Film Processor	54	54	54
EN-52 Printer	14	14	14
EN-90 Contact Printer	14	14	90
EN-109 Printer	14	14	14
Fleet Imaging Support Terminal (FIST)	12	17	39

Activity Group: Engineering And Support Services (cont'd).

III. Performance Criteria (cont'd)

	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
<u>NIPS</u>			
a) Computer Program Maintenance with Documentation (USQ-34/SYQ-64/SYQ-9)	4/1,479	4/1,510	3/1,274
b) Repair Support (USQ-34-/SXQ-8)	2/ 400	2/ 400	2/ 400
c) Tech Services to Fleet Units (USQ-34/SSQ-64/SXQ-8)	4/ 300	4/ 300	4/ 300
d) Installation Support (USQ-34/SYQ-9-/SXQ-8/FIST)	4/ 90	6/ 180	13/ 198
e) Data Base Support	1/ 53	1/ 53	1/ 53
f) Facility Maintenance and Operation (AN/USQ-34/SSQ-64 SYQ-9/SXQ-8)	4/ 150	4/ 150	4/ 150
TOTAL	19/2,472	21/2,593	27/2,375
<u>Electronic Warfare Support</u>			
a) Surface Electronic Warfare Support J Band Receiver and Deception Repeater AN/SLQ-17A(V)2	11/3,017	12/3,410	12/4,000
Tactical Surface ESM Receiver AN/WLR-1H	0/ 644	5/ 700	6/ 800
DECOY - ASMD (Includes MK36, MK-34, and MK-33)	282/ 660	286/ 700	286/ 720
AN/SLQ-22/26/CVA/LPH-ECM	31/ 150	31/ 100	31/ 50
AN/SLQ-20A	44/ 150	44/ 100	44/ 0
AN/SSQ-82 (MUTE)	15/ 250	16/ 210	16/ 50
AN/WLR-1 (Includes Band 10 Tuners)	97/ 250	94/ 250	90/ 50
AN/SLA-10	397/ 150	397/ 0	397/ 0
b) Surface Cryptologic Warfare OUTBOARD Phase I (includes 1 each OK-324/SUQ, OB Ancillaries, AN/SLR-16A, AN/SRD-19A, OE-236/SRD)			
OUTBOARD Phase II (includes 1 each AN/SLR-23 and AN/SQY-8)	53/3,237	60/3,239	65/2,313
CCSC/CCSS (AN/SSQ-93)	19/ 0	26/ 318	34/ 400
COMBAT DF	2/ 929	7/ 550	11/ 625
TOTAL FUNDING	951/9,437	978/9,577	992/9,008

Activity Group: Engineering and Support Services (cont'd)

III. Performance criteria (cont'd)

	<u>FY 1985</u>		<u>FY 1986</u>		<u>FY 1987</u>	
	<u>Units/\$000</u>		<u>Units/\$000</u>		<u>Units/\$000</u>	
<u>GPETE TECHNICAL OPERATIONS</u>						
1) Test Equipment Suitability Evaluations Completed	70/	488				
Test Equipment Allowances: Updated (Shore Activities) Prepared	87/	104				
	83/	223				
Test Equipment Measurement Capability Groups Revised and Updated	87/	213				
2) Preparation of GPETE Technical Documentation	0/	0	200/	440	191/	436
Process GPETE	0/	0	16,000/	404	15,000/	384
Track GPETE during the procurement cycle	0/	0	16,000/	91	15,000/	86
Execute/Validate GPETE Requisitions	0/	0	3,500/	162	3,000/	139
TOTAL FUNDING	1,028		1,097		1,045	
<u>TEST and MONITORING SYSTEMS</u>						
Navy Automatic Testing Program (W/Y)	2/	180	2/	184	1/	94
JLC Program on Automatic Testing (W/Y)	1/	90	1/	92	1/	93
Testing Technology Office & Information Center	8/	664	8/	672	7/	602
ATE Inventory and Data Banks Developed/Maintained	2/	80	2/	281	2/	176
Automatic testing guides and guidance documents (W/Y)	2/	180	2/	184	1/	94
ATLAS Test Programming Language (W/Y)	1/	90	1/	46	1/	50
Automatic Testing Standardization (W/Y)	1/	90	1/	46	1/	50
Automatic courses maintained/offered	12/	128	11/	135	10/	120
Manual Testing/METCAL Program (W/Y)	2/	162	3/	256	2/	176
Perform Calibration Consolidation Studies	2/	24	2/	30	1/	15
Measure Central Data Base Facility	20.5/	1,406	19/	1,167	18/	1,055
TOTALS	3,094		3,093		2,525	

Activity Group: Engineering and Support Services (cont'd)

III. Performance criteria (cont'd)

MAINTENANCE ENGINEERING

	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
<u>Nomenclature and Configuration</u>			
<u>Management (\$000)</u>	287	272	442
Nomenclature requests processed	940	889	654
Tracked in-process engineering change proposals	627	889	646
Update ECP data base	627	889	646
ILS Contract deliverables tracked	125	168	123
CM Audits performed	6	0	0
PYCC (Ship class in program)			0
 <u>Provisioning (\$000)</u>	 1,149	 1,087	 778
New Allowance Parts Lists generated	687	616	441
Revision to Allowance Parts Lists	54	48	34
Provisioning actions completed	514	471	337
Technical referrals	469	420	300
PSD Sheets Tracked	554	514	368
PSD Data Base update	554	514	368
 <u>Field Maintenance Agent (\$000)</u>	 1,282	 1,213	 911
Engineering Support			
Casualty Report/3M reviewed and analyzed	943	857	643
Technical problems investigated/beneficial suggestions evaluated	151	137	103
User Comment sheets responses	64	59	44
Engineering change proposals (ECPs) prepared/reviewed	51	41	34
 <u>Planned Maintenance Systems (PMS) (\$000)</u>	 539	 510	 463
Document developed backfit and new equipment problems corrected	40	39	35
Subsystems developments and redevelopment	92	85	78
Subsystems feedback reports processed	254	229	208
Failure Analysis Reports	301	272	247

Activity Group: Engineering and Support Services (cont'd)

III. Performance criteria (cont'd)

Maintenance Engineering (cont'd)

	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
Installation Control Drawings (ICDs)	221	198	180
Technical Data Packages	35	34	30
<u>DOD Interservicing(\$000)</u>	120	114	115
Specification Generated	504	451	418
<u>Depot Maintenance Interservice Support Agreements (DMISA) (\$000)</u>	88	83	79
DMISA negotiated	2	2	2
DMISA reviewed/updated	5	4	3
<u>Technical Repair Agent (\$000)</u>	383	363	343
Depot assignments made/planned	193	179	176
Technical repair standards developed	117	105	117
Test jigs/fixtures developed	19	17	18
Depot certified	8	7	11
<u>PEDCAP (\$000)</u>	401	380	703
Problem equipment detection and correction	52	49	91
<u>BREAKOUT (BOSS)</u>			
Breakout Reviews	220/ 880	323/ 645	642/1,283
Breakout Enhancement	100/1,320	435/3,263	1,188/8,962
Ent Data Rev/Accept	2,000/ 100	0/ 0	100/ 202
AMC Assignments	0/ 0	1,000/ 500	1,500/ 750
Price Surveillance Review	0/ 0	240/ 300	480/ 600
SUBTOTAL BOSS	2,300	4,708	11,797
<u>Automatic Carrier Landing System (ACLS-DART)</u>			
Pre-Positioning Technicians	14/ 680	14/ 520	14/ 760
Pre-Deployment Grooming/OJT	14/ 650	14/ 535	14/ 821
Logisitics Support/Mgmt	14/ 461	14/ 390	14/ 624
AN/SPN-41 Improvement Mods	0/ 0	0/ 0	0/ 0
AN/SPN-42 Improvement Mods (1)	2/ 115	6/ 520	3/ 303
AN/SPN-43 Improvement Mods (1)	7/ 290	7/ 350	1/ 750
SUBTOTAL ACLS-DART FUNDING	51/2,196	55/2,315	46/3,258

(1) The AN/SPN-42 AND AN/SPN-43 lines fund development, test and evaluation of field changes.

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criterial (cont'd)

Maintenance Engineering (cont'd)

	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
Perform maintenance conversions on (WY) LHAs 1-5 Radio Control; Analyze deficiencies, prepare documentation for submission of ECPs.	1.5/ 143	1.5/ 150	0

Total Maintenance Engineering Funding	8,888	11,195	18,889
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Other Engineering Services

RACC/ATC Updates & Inquiries	70,000/ 42	70,000/ 42	70,000/ 42
UICP Milstrip Documents Processed	20,000/ 24	20,000/ 24	20,000/ 24
UICP Data Updates/Retrievals	125,000/ 75	125,000/ 75	125,000/ 75

TSTP Implementations	24/ 48	37/ 92	37/ 92
TSTP Calibrations	343/ 69	343/ 69	335/ 67
TSTP Repair Actions	130/ 195	129/ 194	130/ 195
TSTP Acceptance Test Actions	35/ 184	35/ 184	35/ 184
RADHAZ Surveys	12/ 122	14/ 142	27/ 275
FMP Support (WY)	5/ 312	5/ 313	5/ 344
ABFC Reviews (WY)			1/ 55
Topside FMP Design Eng Evals	18/ 290	18/ 337	18/ 342

Fleet Tactical Communications Program:

External Communications Support	7/ 437	6/ 406	5/ 325
Technical Drawings	2/ 99	2/ 116	1/ 55
Support for Fleet Improvements	4/ 246	5/ 280	4/ 230
Technical Documentation Validation	3/ 181	3/ 197	2/ 131
Software Support	5/ 275	1/ 230	3/ 174
Logistics Technical Support	2/ 96	2/ 128	1/ 78

C <sup>3</sup> I Engineering	33.6	0	0
W/YS			
\$	<u>3,358</u>	<u>0</u>	<u>0</u>
Total Other Engineering Services			
Funding	6,053	2,829	2,688

ADP SECURITY

ADP Test and Evaluations			
(T&E) per year	14/ 420	14/ 420	9/ 270
Technical Assistance	21/ 267	33/ 412	25/ 312
Technical Support	/ 218	/ 149	/ 60
IG Support	20/ 175	20/ 175	19/ 169
TOTAL FUNDING	\$1,080	\$1,156	\$811

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criterial (cont'd)

Maintenance Engineering (cont'd)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
	<u>Units/\$000</u>	<u>Units/\$000</u>	<u>Units/\$000</u>
<u>INSPECTION TESTING</u>			
Qualification Tests	20/ 42	23/ 51	23/ 52
Special Tests	8/ 38	7/ 32	2/ 10
T&E Master Plans Prepared	33/ 500	34/ 500	33/ 485
TOTAL FUNDING	\$580	\$583	\$547

IV. Personnel Summary. None.



Department of the Navy  
Operation and Maintenance, Navy

Activity Group: Contractor Technical and Maintenance Support  
Budget Activity: VII - Central Supply & Maintenance  
Claimant: Space and Naval Warfare Systems Command

I. Description of Operations Financed.

Fleet Engineering/Technical Support - Program improves and maintains electronic readiness by providing emergency technical assistance and improving shipboard maintenance capabilities. This technical assistance is beyond ships force capability. Support is provided by Mobile Technical Unit (MOTU) contractor efforts and Navy in-house services. Requirements for technical services are determined annually in conferences with Fleet representatives, through review of past year utilization data, new equipment and field change delivery schedules, Navy manning levels, ship movements, and political climate in strategic areas.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appro- priation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Fleet Engineering/ Technical Support	<u>6,095</u>	<u>6,552</u>	<u>6,515</u>	<u>6,377</u>	<u>6,247</u>	<u>-130</u>
Total Contractor Technical and Maintenance Support	6,095	6,552	6,515	6,377	6,247	-130

Activity Group: Contractor Technical and Maintenance Support (cont'd)

B. Reconciliation of Increases and Decreases

	<u>Amount</u>
1. FY 1986 Current Estimate	\$6,377
2. Pricing Adjustments	217
A. Average Grade Reduction	(-3)
B. Other Pricing Adjustments	(220)
3. Functional Program Transfers	-747
A. Transfer-out	(-747)
1. Intra-Appropriation	-747
Inspection and Survey -	
Reduction of 205 support	
visits transferred to	
Logistics Support. BA VII	
AG/SAG - INSURV.	
4. Program Increases	430
A. Other Program Growth in FY 1987	(430)
1. Increase will provide for	430
additional scheduled ship visits	
to perform grooming of communications/	
electronic systems prior to deployment	
to ensure maximum interoperability between	
the ship and the battle group.	
5. Program Decreases	-30
A. Annualization of FY 1986 Decreases	(-30)
1) Continued Implementation of Audit	-30
Savings identified in FY 1986.	
6. FY 1987 President's Budget Request	\$6,247

Activity Group: Contractor Technical and Maintenance Support (cont'd)

III. Performance Criteria.

<u>Fleet Engineering/Technical Support</u>	<u>FY 1985</u> <u>Units/\$000</u>	<u>FY 1986</u> <u>Units/\$000</u>	<u>FY 1987</u> <u>Units/\$000</u>
Mobile Technical Unit WYs (contractor)	34/2,400	26/2,100	26/2,186
Inspection and Survey (INSURV)	205/ 564	205/ 718	0/ 0
Emergency technical assists (in-house)	588/2,028	646/2,326	688/2,580
Scheduled ship visits (in-house)	83/1,103	91/1,233	108/1,481
Total	6,095	6,377	6,247

IV. Personnel Summary. NONE

DEPARTMENT OF THE NAVY  
OPERATION AND MAINTENANCE, NAVY

Activity Group: ASW Systems Support  
Budget Activity: VII - Central Supply & Maintenance  
Claimant: Space and Naval Warfare Systems Command

I. Description of Operations Financed

Undersea Surveillance - The purpose of this program is to provide support for SOSUS and SURTASS. SOSUS provides for the collection and processing of undersea acoustic data. SOSUS consists of cable connected to shore sites and shore processing equipment. This program maintains existing SOSUS against cable breaks and equipment breakdowns; improves existing SOSUS system through backfits to shore electronics; and installs new shore facilities.

Maintenance of the existing systems is accomplished by three cable ships. Three ships are required in order to continuously provide one ship in the Atlantic and the Pacific for cable guard and repair services. In addition, a cable transporter and a survey ship support the program. Also included is expendable cable repair material.

U.S. Navy maintenance of SOSUS shore electronic systems hardware is augmented by American Telephone and Telegraph Technology (AT&T) Resident Engineer Support (one or two engineers per site) and configuration control support and Naval Electronic Systems Engineering Center maintenance of selected site hardware. Also included is the maintenance of shipyard periods, shore and cable inspection/repair and refurbishment of shore electronic hardware.

New deployments are achieved by an extensive oceanographic hydrographic and acoustic survey program followed by cable implantment and burial and array implantment.

SURTASS provides for collection and processing of undersea acoustic data. It employs a passive hydrophone array towed by a dedicated surface ship, designated T-AGOS, for data collection. A satellite relay is used to transmit acoustic data to a shore facility for processing and display.

Funds are required for operation and support of SURTASS units. The production unit operations and support includes:

(1) SURTASS contractor technicians to operate and maintain the SURTASS electronics aboard the T-AGOS ships;

(2) Establishment and operation of on-shore logistics support. This includes contractor operated intermediate maintenance facilities and spare parts depots for unique SURTASS equipment in the Norfolk, VA and Pearl Harbor, HI areas;

(3) Computer Software Maintenance

During the phased introduction of the first 12 T-AGOS/SURTASS units (i.e., one unit every 2.5 months) significant non-recurring start up costs are required in advance of production unit operations. These non-recurring costs are : (1) contractor technicians training required to begin 12 months prior to each unit becoming operational; (2) establishment of shore logistics support depots.

Activity Group: ASW Systems Support (cont'd)

ASW Surface Ship Technical Support - This program funds a diversity of tasks in support of the ASW Master Strategy and Plan through the ASW Master Plan Group. Includes conducting six Ship ASW Readiness/Effectiveness Measuring (SHAREM) exercises and the installation and collection of data from specialized equipment at Fleet exercise ranges under the Post-Operational Analysis Critique and Exercise Review (PACER) program. Also funds the installation and checkout of a specialized SQS-26/53 active sonar tape recorder on selected surface combatants and the duplication and distribution of training tapes made from this system, the collection of environmental data from specified Arctic and other ocean areas for both the Arctic Warfare Program and the Basic Acoustics Model User's Support (BAMUS) program environmental databases, and the operation of and data collection from acoustic signal processing systems both in the Fleet and under development.

ASW Aviation Technical Support - This program also funds a diversity of tasks in support of the ASW Master Strategy and Plan through the ASW Master Plan Group. Includes conducting twenty-four (24) Air Readiness/Effectiveness Measuring (AIREM) exercises involving maritime patrol (VP), carrier-based fixed-wing (VS), carrier-based rotary wing (HS), and surface ship combatant-based rotary wing (HSL) ASW aircraft platforms. Exercise breakdown is normally 3 Fleet exercises per platform per coast per year. AIREM funding also includes on-site data collection, ASW air exercise range support during the AIREM exercises, processing of collected data, and publishing and dissemination of exercise reports. Also included in this program is funding for the Integrated RAINFORM Analysis System (IRAS) which is maintaining a database containing worldwide ASW air platform performance effectiveness results that originate in the RAINFORM message reporting system.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

			FY 1986		FY 1987	
	FY 1985	Budget Request	Appropriation	Current Estimate	Budget Request	Change
Undersea Surveillance	141,517	164,385	164,177	173,838	179,415	5,577
ASW Surface Ship Tech Spt	0	0	0	6,081	4,005	-2,076
ASW Airborne Tech Spt	0	0	0	732	1,071	339
TOTAL O&M,N	141,517	164,385	164,177	180,651	184,491	3,840

Activity Group: ASW Systems Support (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1986 Current Estimate		\$180,651
2. Pricing Adjustments		8,633
A. Stock Fund	(20)	
1. Non-Fuel	20	
B. Industrial Fund Rates	(4,260)	
C. Other Pricing Adjustments	(4,353)	
3. Program Increases		3,925
A. Other Program Growth in FY 1987	(3,925)	
<u>Undersea Surveillance</u>	3,615	

Increase in software maintenance in support of the Operational System Support Activity (OSSA) for providing life cycle support for subsystems transitioning to operational status. (233)

SURTASS ship operating months increase from 92 to 129 as additional T-AGOS ships become operational. This results in the following increases:

-- Additional ship technicians required as T-AGOS fleet increases. (1,162)

--Additional manpower required at Array Maintenance facilities, as increased array operating months results in more maintenance actions. (455)

--Additional consumables, replenishment spares and depot maintenance required as ship operations increase. (612)

--Additional program and field activity support required: training for additional ship technicians, and additional field support teams to support the increased number of ships. (1,153)

ASW Airborne Technical Support 310

Reflects AIREM Range Support increase of 2.2 W/Y for redeployment of on-site data collectors with specialized data collection equipment in order to collect aircraft

Activity Group: ASW Systems Support (cont'd)

B. Reconciliation of Increases and Decreases.

ASW Borne Technical Support (cont'd)

performance characteristics for  
ASW fixed wing carrier based (VS),  
rotary wing (HS), and rotary wing  
surface ship based (HSL) aircraft.

4. Other Program Decreases in FY 1987 (-8,718)

A. Other Decreases (-8,718)

1) Undersea Surveillance -6,411

Decrease in special ship lease  
days from 60 to 40. (-1,953)

Decrease in expendables supply  
for the shipboard deployment of  
cables and arrays. (-675)

Sonar Data Recorder refurbishment  
effort deleted in FY-87. (-587)

Decrease in site preparation, installation  
and miscellaneous support of non AT & TT  
subsystems to the fleet. (-494)

Decrease in SOSUS software support  
installation planning, and materials,  
Base Electronic System Engineering Plan  
(BESE)P/site prep, hardware maintenance  
and installation, and systems engineering  
to support installation of SOSUS OPN Backfit  
procurements of Adaptive Beamformer (ABF),  
Integrated Acoustic Display (IAD)/Wideband  
Acoustic Recall (WBAR,) Inter-array  
Processor (IAP) II, and  
new deployment equipment. (-1,317)

Decrease in independent validation and  
verification, hardware configuration  
maintenance, and Inter-array Processor  
II (IAP II) support at NOSC. (-475).

Decrease in Depot Logistic Support for  
the acquisition of hardware. Provides  
consumables and failed item repair and  
replenishment for SOSUS OPN Backfit  
procurement of Adaptive Beamformer (ABF).  
Integrated Acoustic Display (IAD)/Wideband  
Acoustic Recall (WBAR), IAP II and  
deployment equipment. (-300)

Activity Group: ASW Systems Support (cont'd)

B. Reconciliation of Increases and Decreases.

Other Program Decreases (cont'd)

Decrease in number of software  
Trouble Reports against SURTASS  
operational software that will  
be corrected. (-610)

ASW Surface Ship Technical Support -2,307

7.2WY of effort not required due  
to a reduction in the number of  
SHAREM exercises by four.

PACER: 0.1WY effort reduction in  
installation checkout and program  
verification of specialized data  
collection equipment on specified  
Fleet exercise range.

Weapons Readiness: 12.4WY effort  
reduction in FY 1987 program  
for the installation and checkout of  
SQS-26/53 active sonar tape recorders,  
the duplication and distribution of  
active sonar training tapes as well  
as the accompanying training sessions,  
the collection of environmental data  
for the Basic Acoustic Model Users  
Support (BAMUS) Program, and the collection  
of torpedo warhead effectiveness data against  
surface and submarine hull structures.  
Eliminates the Arctic Warfare Program.  
ASW Readiness: 0.2WY effort reduction  
for on-site effort in collection of ASW  
readiness data.

5. FY 1987 President's Budget Request

\$184,491



Activity Group: ASW Systems Support (cont'd)

III. Performance Criteria

<u>Undersea Surveillance</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
1. <u>SOSUS</u>			
Cable & Survey			
Ship Support	47,490	40,991	44,146
(Ship Days)	(1,917)	(1,825)	(1,825)
Maintenance/Install/ Restor/Material/ Fleet Support/ Travel & Training	65,430	94,242	92,408
2. <u>SURTASS</u>	28,597	38,605	42,861
(Operating Months)	(51)	(92)	(129)
TOTAL	141,517	173,838	179,415

<u>ASW Operational Technical Support</u>	<u>FY 1985</u> <u>WY/\$000</u>	<u>FY 1986</u> <u>WY/\$000</u>	<u>FY 1987</u> <u>WY/\$000</u>
SHAREM		18.8/1,949	11.6/1,200
PACER		6.4/ 664	6.3/ 650
Weapons Readiness		27.0/2,800	14.6/1,505
ASW Readiness		6.5/ 668	6.3/ 650
TOTAL		6,081	4,005

ASW Air Technical Support

AIREM	5.3/ 550	5.1/ 596
AIREM MGMT&SPT	1.8/ 182	1.8/ 225
AIREM RANGE SPT	0.0/ 0	2.2/ 250
TOTAL	732	1,071

IV. Personnel Summary (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>	<u>1</u>	<u>25</u>	<u>25</u>
Officer	17	21	21
Enlisted	2	4	4

DEPARTMENT OF THE NAVY  
OPERATION AND MAINTENANCE, NAVY

Activity Group: Maintenance of Real Property  
Budget Activity: VII - Central Supply & Maintenance  
Claimant: Space and Naval Warfare Systems Command

I. Description of Operations Financed

Facilities Maintenance - Provides for both scheduled and day-to-day recurring facilities maintenance and repair actions, as well as emergency service work needed to preserve facilities at the Space and Naval Warfare Systems Command field activities in an operational status and within Navy standards. The facilities include the following types: electronic shops, electronic laboratories, administrative spaces, electronics engineering, storage buildings, and maintenance of utilities, roads and grounds.

Minor Construction - Minor Construction provides for interior alterations and upgrading of spaces within the Commanding Officer's authority to accommodate new electronics mission taskings within shop, laboratory and engineering spaces at field activities of the Space and Naval Warfare Systems Command.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

		FY 1986			FY 1987	
	FY 1985	Budget Request	Appro- priation	Current Estimate	Budget Request	Change
Facilities Maintenance	1,961	853	853	1,495	1,629	134
Minor Construction	<u>1,470</u>	<u>247</u>	<u>248</u>	<u>248</u>	<u>577</u>	<u>329</u>
 TOTAL Maintenance of Real Property	3,431	1,100	1,101	1,743	2,206	463

Activity Group: Maintenance of Real Property (Cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1986 Current Estimate		\$1,743
2. Pricing Adjustments		93
A. Industrial Fund Rates	(76)	
B. Other Pricing Adjustments	(17)	
3. Program Increases		370
A. Other Program Growth in FY 1987	(370)	
1) <u>Facilities Maintenance</u> -	53	
Additional funds will reduce the non-deferrable backlog of essential maintenance and repair of existing facilities.		
2) <u>Minor Construction</u> - These funds will	317	
be used to upgrade existing, outdated facilities at NESEC, Vallejo. Deficiencies exist such as improper grounding systems in very old buildings where electronic engineering fleet support is carried out and where proper grounding is essential.		
4. FY 1987 President's Budget Request of functions		\$2,206

III. <u>Performance Criteria and Evaluation</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
<u>Maintenance of Real Property</u>			
Backlog, Maint/Repair (\$000)	897	831	834
Total Buildings (KSF)	1,337	1,337	1,337
IV. <u>Personnel Summary (END STRENGTH) N/A</u>			

DEPARTMENT OF THE NAVY  
OPERATION AND MAINTENANCE, NAVY

Activity Group: Base Operations  
Budget Activity: VII - Central Supply & Maintenance  
Claimant: Space and Naval Warfare Systems Command

I. Description of Operations Financed

Operation of Utilities (OOU) - Utilities provide for electricity, heat, steam, water and sewage purchased from a Naval activity or commercial source, depending on the location of the activity. The field activities of the Space and Naval Warfare Systems Command do not operate power generation or central steam plant facilities.

Other Engineering Support (OES) - Provides for custodian services, refuse disposal, emergency service work (other than real property), fire protection, leases, guard services, pest control, general services for shops, laboratories and administrative spaces in field activities of the Space and Naval Warfare Systems Command.

Base Communications - Base Communications provides for such costs as services, local, autovon and long distance calls, switchboard support, message center support and telegraphic message capability, purchased communications costs, initial installation and monthly recurring charges.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

	FY 1985	President's Budget	FY 1986 Appro- priation	Current Estimate	FY 1987 Budget Request	Change
Utilities	2,044	2,184	2,180	2,180	2,983	803
Other Engineering Support	1,457	1,600	1,596	1,596	2,021	425
Base Communications	<u>2,569</u>	<u>2,683</u>	<u>2,683</u>	<u>2,677</u>	<u>2,781</u>	<u>104</u>
TOTAL Base Operations	6,070	6,467	6,459	6,453	7,785	1,332

Activity Group: Base Operations (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1986 Current Estimate		\$6,453
2. Pricing Adjustments		310
A. Industrial Fund Rates	(151)	
B. Other Pricing Adjustments	(159)	
3. Program Increases		1,031
A. Other Program Growth in FY 1987	(1,031)	
1) <u>Utilities</u> - Provides utility costs for newly constructed facilities (6) which will come on-line in FY 1987. Provide heat for warehouses which had not been previously heated, in which electronic functions will be performed requiring full time work force personnel.	700	
2) <u>Other Engineering Support</u> - The program growth will pay for other engineering support services required of newly constructed MILCON facilities. In addition, required lease of new facility at NESEC, Charleston will require a portion of these program growth funds.	331	
4. Program Decrease		-9
A. Other Program Decrease in FY 1987	(-9)	
1) <u>Base Communications</u> - The Decrease will result in the reduction of 3 main lines.	-9	
5. FY 1987 President's Budget Request		\$7,785

SPAWAR BA: 07

III. Performance Criteria and Evaluation      FY 1985      FY 1986      FY 1987

BASE OPERATIONS

OPERATIONS OF UTILITIES

TOTAL ENERGY CONSUMED (MBTU'S)	279,000	290,089	389,500
TOTAL NON-ENERGY CONSUMED (000 GALS)	2,000	3,000	3,000

BASE COMMUNICATIONS

NUMBER OF INSTRUMENTS	4,002	4,020	4,300
NUMBER OF MAINLINES	1,331	1,343	1,345
DAILY AVERAGE MESSAGE TRAFFIC	5,300	5,460	5,570

OWNERSHIP OPERATIONS

OTHER ENGINEERING SUP (\$000)	1,457	1,596	2,021
HAZARDOUS WASTE (\$000)			

IV. Personnel Summary (End Strength) N/A

70459

Department of the Navy  
Operation and Maintenance, Navy  
Exhibit OP-5

Activity Group: Command and Administration  
Budget Activity: 7-Central Supply and Maintenance  
Claimant: Office of Naval Acquisition Support

I. Description of Operations Financed.

The Command and Administration function of the Office of Naval Acquisition Support provides technical, contractual, and material support for those functions which require independence of the Naval Systems Commands; to perform coordination of functions which span several organizations; and to perform such other functions and tasks as assigned by higher authority. Specifically included are competition advocacy, specifications control, contracts and business management matters; reliability, maintainability, and quality assurance in Navy acquisition programs; and senior civilian personnel career management. Funds within this activity group include personnel compensation, printing and reproduction, travel, training, supplies, office equipment and other expenses to support the Director and his staff.

II. Financial Summary (Dollars in Thousands).

A. Sub-activity Group Breakout.

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appro- priation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Command and Adminis- tration	<u>19,168</u>	<u>20,040</u>	<u>12,345</u>	<u>8,915</u>	<u>8,198</u>	<u>-717</u>
Total, (Command and Adminis- tration)	19,168	20,040	12,345	8,915	8,198	-717

Activity Group: Command and Administration (Cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1986 Current Estimate	8,915
2. Pricing Adjustments	107
A. Annualization of Health Benefits (-11)	
B. Mission Travel Costs (13)	
C. Equipment Maintenance Contracts (105)	
3. Program Decreases	-824
A. Reduction in Mission Support Contracts (Value Engineering and Maintenance Contracts)	(-824)
4. FY 1987 President's Budget Request	8,198

III. Performance Criteria.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Contracting Documents Processed by ONAS (Contracting plans, pre and post business clearances, Justifications and Approval Contractor Support Service approvals and Federal Acquisition Regulation deviation requests).	1,200	1,400	1,600
Total Value of Navy Contracts Authorized by ONAS (Billions of Dollars)	\$50B	\$50B	\$50B

IV. Personnel Summary.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military End Strength</u>	36	35	30
Officer	31	32	27
Enlisted	5	3	3
B. <u>Civilian End Strength</u>	170	121	121
USDH	170	121	121



Department of the Navy  
Operation and Maintenance, Navy  
Exhibit OP-5

Activity Group: Field Operations  
Budget Activity: 7-Central Supply and Maintenance  
Claimant: Office of Naval Acquisition Support

I. Description of Operations Financed

Resources within this Activity Group finance field activities which provide specialized services throughout the Office of Naval Acquisition Support.

Navy Management Systems Support Office (NAVMASSO):

The mission of the Navy Management Systems Support Office (NAVMASSO) is to design, develop, implement and provide life-cycle support for standard Fleet Nontactical Automated Information Systems afloat and ashore. NAVMASSO, upon implementing a system, provides training to the Fleet user personnel, assists Fleet users in the operation of these information systems, and performs other tasks in the software analysis and functional areas as directed by higher authority. NAVMASSO functions as the single Central Design Agency (CDA) for Fleet nontactical automated information systems.

Consolidated Civilian Personnel Office - Crystal City:

The mission of the consolidated Civilian Personnel Office - Crystal City (CCPO-CC) is to provide the full range of civilian personnel services for Navy components in the National Capital Region including position classification, position management, staffing, performance appraisal systems, employee relations and services, employee assistance programs and employee development and training programs. In addition, CCPO-CC manages DON-wide career management programs, initiating and conducting NME-wide occupational studies and analyses leading to the establishment of formal career programs and the development of training requirements. The CCPO-CC maintains liaison with the Systems Commands, Chief of Naval Operations, Office of Personnel Management and other offices on civilian personnel operating policies and procedures. Recruiting efforts include nation-wide campaigns to locate and hire qualified personnel with skills currently in short supply in the National Capital Region.

Automated Data Processing Selection Office (ADPSO):

ADPSO is responsible for evaluating and selecting for approval by the senior ADP Policy Official, ADP Resources (equipment, software, and contractual services) which are above specified thresholds; acting, when delegated, as the Department of the Navy Contracting Office for the procurement of the foregoing ADP resources; and performing such other functions as directed.

Activity Group: Field Operations (Cont'd)

Miscellaneous Field Activities:

The mission of the Naval Industrial Resources Support Activity (NAVIRSA, previously NMCIRD) is to provide field support for the Commercial Activities and Industrial Plant Equipment Programs. All other miscellaneous field functions were transferred to other activities by the disestablishment of NAVMAT Headquarters.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Group Breakout

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1986</u>	<u>FY 1986</u>	<u>FY 1987</u>	<u>Change</u>
		<u>Budget</u>	<u>Appro-</u>	<u>Current</u>	<u>Budget</u>	
		<u>Request</u>	<u>priation</u>	<u>Estimate</u>	<u>Request</u>	
NAVMASSO	23,417	32,803	32,275	32,101	37,499	+5,398
CCPO-CC	11,272	8,945	2,107	10,112	10,326	+214
ADPSO	2,802	2,071	2,129	3,329	3,683	+354
MISC FLD	<u>21,508</u>	<u>3,668</u>	<u>3,667</u>	<u>999</u>	<u>1,087</u>	<u>+88</u>
Total (Field Activities)	58,999	47,487	40,178	46,541	52,595	+6,054

Activity Group: Field Operations (Cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1986 Current Estimate	\$46,541
2. Pricing Adjustments	1,012
A. Industrial Fund Rates	(+13)
B. Other Pricing	
2) Other Price Growth	(+999)
3. Program Increases	+9,090
A. Other Program Growth in FY 1987	
1) Medical/Dental:	(+1,003)
Continue development of the software which automates medical and dental administrative functions afloat, e.g., immunization control, occupational health surveillance record keeping, clinical administrative support.	
2) Administrative:	(+224)
To support implementation for the administrative (ADM) support application software module and shipboard data system (SDSA) afloat systems. The cost of implementation includes the building of the initial ship, cost of initial training for the ships crews and the distribution of the software.	
3) Maintenance:	(+3,100)
Begin development of the Planned Maintenance Support (PMS) software module. PMS provides managers with an aid in developing work schedules and personnel assignments	

Activity Group: Field Operations (Cont'd)

including the accountability for maintenance actions (\$.930).

Support initial data base building and crew training functional enhancements, retrofitting of new software releases and fleet assistance via "trouble desk" and assist visits for Organizational Maintenance Management System (OMMS) (\$2,170).

- 4) Supply: (+3,864)  
All of the following systems support fleet inventory accuracy enhancements.

Support initial data base building and crew training functional enhancements, retrofitting of new software releases and fleet assistance via "trouble desk" and assist visits for the Supply Financial Module (\$1,344).

Continue development and implementation of SNAP software systems for Resale Methodology Operations Management/Food Services Automated Methodology (ROM/FSAM) Automated Methodology Costs support development, implementation, and life-cycle support (\$1,141).

Logistics Application of Automated Marking and Reading Symbols (LOGMARS) promotes the use of bar-coding symbology and technology for military logistics application. Costs support software development (\$1,379).

Activity Group: Field Operations (Cont'd)

5) Command Support:	(+285)	
Provides support for administrative efforts which include executive level management, plan-planning, financial management, facilities management, ADP support, personnel management, and administrative/clerical.		
6) Increase in CCPPO Printing and Reproduction	(+77)	
7) Increase in ASPSO Maintenance Support	(+449)	
8) NAVIRSA Engineering Support	(+88)	
5. Program Decreases (NAVMASSO, Norfolk, VA)		-4,048
C. Other Program Decreases FY 1987		
1) SNAP AVIATION	(-653)	
Reduction to Aviation 3-M due to phase down of the program and replacement by NALCOMIS.		
2) Maintenance	(-2,984)	
Intermediate Maintenance Management Subsystem (IMMS). With completion of IMMS-RT Release 3 development in September 1986, IMMS-RT will transition from development to life cycle maintenance.		
3) Supply	(-286)	
With completion of Shipboard Uniform Automated Data Processing System - Real Time (SUADPS-RT) Release 3 development in April 1986, SUADPS-RT will transition from development to life cycle maintenance.		
4) Decrease in ADPSO Support Contracts	(-125)	
6. FY 1987 President's Budget Request		\$52,595

Activity Group: Field Operations (Cont'd)

III. Performance Criteria.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
<u>NAVMASSO</u>				
Automated Information Systems in Development				
SNAP I	3	9	10	10
SNAP II	4	8	10	11
NALCOMIS	1	1	1	1
TOTALS	<u>8</u>	<u>18</u>	<u>21</u>	<u>22</u>

Automated Information Systems in Implementations

SNAP I	1	3	10	10
SNAP II	3	4	6	8
NALCOMIS	0	1	1	1
TOTALS	<u>4</u>	<u>8</u>	<u>17</u>	<u>22</u>

Number of Platforms/Sites Served

SNAP I	85	98	98	98
SNAP II	51	100	210	320
NALCOMIS	0	0	22	40
TOTALS	<u>136</u>	<u>203</u>	<u>330</u>	<u>458</u>

Number of Scheduled Assist Visits

SNAP I	68	78	156	168
SNAP II	41	80	160	300
NALCOMIS	0	4	18	18
TOTALS	<u>109</u>	<u>162</u>	<u>334</u>	<u>486</u>

CCPO

Population Served	12,000	12,000	12,000	12,000
SYSOMS Served	5	5	5	5
Activities Served	17	17	17	17
Number Students Trained	5,900	6,500	7,250	7,250
Number Personnel Actions	60,000	60,000	60,000	60,000
Number Recruitment Actions	3,400	3,900	4,000	4,000
Number Classification Actions	9,700	9,900	10,000	10,000

ADPSO

Number of Contracts Awarded	8	12	14	13
Contracts Administrated	100	110	125	140
Value of Contracts (Millions)	750	871	1,513	1,800

Activity Group: Field Operations (Cont'd)

IV. Personnel Summary. (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. Military	<u>281</u>	<u>324</u>	<u>327</u>
Officer	39	41	41
Enlisted	242	283	286
B. Civilian	<u>622</u>	<u>632</u>	<u>689</u>
USDH	622	632	689

Department of the Navy  
Operation and Maintenance, Navy  
Exhibit OP-5

Activity Group: Industrial Preparedness  
Budget Activity: 7-Central Supply and Maintenance  
Claimant: Office of Naval Acquisition Support

- I. The programs financed under this activity group include:  
(1) Government-Owned Contractor-Operated (GOCO) Facilities.  
(2) Industrial Readiness.

Government-Owned, Contractor-Operated Facilities (GOCO). Provides for lease administration of GOCO facilities and drydocks. Also provides for maintenance, protection and storage of government-owned special tooling/test equipment required for Navy programs in contractor facilities.

Industrial Readiness. Provides for development of formal plans with industry for emergency production of weapons systems. It involves planning with individual producers of critical items for a specific level of production sufficient to meet surge and mobilization requirements. It provides for the development of industrial preparedness measures to ensure utilization of improved techniques to shorten production lead time and reduce requirements for industrial manpower and critical materials. Also, the program funding provides for standby and maintenance of production lines as well as the packing, crating and handling of special tooling and special test equipment being moved to mobilization storage facilities. Effective FY 1986, the Industrial Preparedness program was functionally transferred from Chief of Naval Material to the hardware systems commands.

II. Financial Summary (Dollars in Thousands).

A. Sub-activity Group Breakout.

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Industrial Readiness	6,706	2,283	2,283	0	0	
Govt Owned-Contractor Operated	<u>106</u>	<u>94</u>	<u>94</u>	<u>0</u>	<u>0</u>	<u>    </u>
Total, Industrial Preparedness	6,812	2,377	2,377	0	0	



Activity Group: Industrial Preparedness (cont'd)

B. Reconciliation of Increases and Decreases

\$ in 000

1. FY 1986 Current Estimate	0
2. Pricing Adjustments	0
3. Functional Transfers	0
4. Program Increases	0
5. Program Decreases	0
6. FY 1987 President's Budget Request	0

III. Performance Criteria

FY 1985

FY 1986

FY 1987

GOCO Facilities:

Special tooling maintenance operations	2,078
Facility/drydock leases	14
Autoclave maintenance	1
Nuclear drydock activation	0
FMC security projects	0

Industrial Readiness:

Industrial Preparedness Agreements	65
Surge Planning Projects	0

Industrial Preparedness:

Measures Developed	0
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Stand-by line for production lines for mobilization

3

IV. Personnel Summary.

None for this activity.

Department of the Navy  
Operations and Maintenance, Navy  
Exhibit OP-5

Activity Group: Base Operations  
Budget Activity: 7-Central Supply and Maintenance  
Claimant: Office of Naval Acquisition Support

I. Description of Operations Financed.

Base Communications includes functions which support the entire scope of operations. Base Communications provides services including leased lines, toll charges, WATS, common equipment, station equipment, local calls, interdepartmental dial service (IDS), telephone directories, and other related telephonic expenses of the Office of Naval Acquisition Support.

II. Financed Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1985</u>	<u>FY 1986</u>			<u>FY 1987</u>	
		<u>Budget</u>	<u>Appro-</u>	<u>Current</u>	<u>Budget</u>	<u>Change</u>
		<u>Request</u>	<u>priation</u>	<u>Estimate</u>	<u>Request</u>	
Physical Security		154				
Base Communications	<u>439</u>	<u>448</u>	<u>447</u>	<u>447</u>	<u>201</u>	-246
Total, (Base Communications)	439	602	447	447	201	-246

B. Reconciliation of Increases and Decreases.

	<u>Amount</u>
1. FY 1986 Current Estimate	447
2. Pricing Adjustments	18
A. Communications Pricing Adjustments	(18)
3. Program Decreases	-264
A. Reflects decreased number of telephone instruments and main telephone lines required by ONAS. (-264)	
4. FY 1987 President's Budget Request	201

Activity Group: Base Operations (Cont'd) \_\_\_\_\_

### III. Performance Criteria.

FY 1985

FY 1986

FY 1987

Number of telephone  
instruments  
Number of main lines  
Daily average message  
traffic

803

300

200

428

200

175

2500

1000

1000

#### V. Personnel Summary.

A. Military  
Officer  
Enlisted

$$\frac{1}{10}$$
$$\frac{1}{10}$$
$$\frac{1}{10}$$

0

0

0

B. Civilian - N/A

Department of the Navy  
Operation & Maintenance, Navy

Activity Group: Field Operations  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Chief of Naval Operations (CNO) (OP-09B)

I. Description of Operations Financed.

The Naval Data Automation Command (NAVDAC) coordinates the development, testing, support, standardization and acquisition of major Automated Information Systems (AIS's), Automated Data Processing Equipment (ADPE), data communications equipment and services, and information systems policies and standards. NAVDAC provides this Navy-wide support through specific task assignments to the Navy Regional Data Automation Center (NARDACs) and Navy Data Automation Facility (NAVDAFS) for the required programming, computer processing and technical support. These tasks fall into four major functional areas as follows: (1) Systems Software, Data communications and Standards program which support systems software acquisition, maintenance, installation, and problem resolution for DoN non-tactical information systems and provide technical services ranging from development and maintenance of regional data processing networks to support Navy-wide information systems, standards development and performance evaluation; (2) Computer Program Development programs manage the development and implementation of policies, and procedures related to applications software engineering and quality assurance, provide technical guidance, and assistance in applications software and supporting technology areas to all Navy ADP activities, consolidate functionally duplicative systems, and install newly consolidated systems at multiple sites; and (3) Computer System Operations programs provide technical direction for computer systems operation Navy-wide, including development of policies, plans, standards and procedures governing establishment, growth and management of DoN non-tactical data processing installations, and design, development, implementation and maintenance of computer hardware and its related operational systems for all echelons of the Navy; and (4) Plans, Resources and Support programs develop DoN information systems plans, translate DoN approved information systems, concepts, and objectives into time phased resource requirements and formulate major policy on all aspects of Navy information systems management.

Within the four major functional areas are 22 programs that cross these functional areas. They are:

a. Financial. The Navy ADP Budget System provides automated support to Commander, Naval Data Automation Command (COMNAVDAC) in compilation, review/revision, preparation, and submission of the Navy ADP Budget. The "Financial Management Information System" (FMIS) is an automated financial management information system that provides NAVDAC management the capability to access financial information from its activities, expeditiously, while the information is still relevant. Additionally, FMIS provides a standard method of measuring activity performance and acts as a communication network between the NARDACs and NAVDAC for the exchange of financial data.

Activity Group: Field Operations (Cont'd)

I. Description of Operations Financed. (cont'd)

b. Type Commanders Headquarters Automated Information System (THAIS). Provides seven Type Commanders with a standardized, integrated automated information system to manage logistics, operations, maintenance and administration of ships and aircraft that must remain in operational readiness.

c. Architecture. Review Navy non-tactical ADP policy, organization, management requirements, and future planning. These reviews are initial steps in responding to the basic National Academy of Sciences recommendation that the Navy seize "the rapidly developing opportunity to improve its efficiency, economy, and readiness by improving its ability to deal with information critical to its functions."

d. Bases and Stations Information System (BASIS). To provide ADP support to 110 bases and stations in 16 functional areas through development of functionally standard, centrally designed and maintained multi-site/multi-year systems.

e. Bases/Stations Communications Support. Integrates eight closely related projects to provide a general communications architecture to be employed as a host independent network.

f. DoN Implementation. A DoN sponsored program which will provide long-haul data communications connectivity to authorized users. This program provides technical support required to field the network, develops integration, plans and develops standard interfaces.

g. Information Systems Standards Management. Serves as the Department of the Navy (DoN) and Information Processing Standards for Computers (IPSC) Programs Coordinator. Supports development, coordination, publication, maintenance of standards for Navy, research, and acquisition of automated tools for standards development.

h. Technical Support. The major functions are to (1) direct the development, control, and distribution of all systems software and support technology; (2) manage the receipt, control, and maintenance of all vendor supplied software; (3) plan, manage, and direct the installation of systems software at all Navy ADP activities.

i. Teleprocessing Improvement. This program directly supports a major goal of Navy teleprocessing policy to integrate Information Systems (IS) and teleprocessing planning and management on a Navy-wide basis, and to ensure controlled evolution toward standard Navy-wide networking utilities and teleprocessing services.

Activity Group: Field Operations (Cont'd)

I. Description of Operations Financed. (cont'd)

j. Umbrella Contracts. This program supports the mission to coordinate ADP systems to minimize duplication of reporting and/or processing effort. The program provides ADP systems and services on a DoN-wide basis and consists of a series of compatible and coordinated projects.

k. Information System Development Tools and Techniques. This program is the primary vehicle for stimulating advances in the technology used by Navy Information System developers to design and implement systems for use in the non-tactical environment. The program identifies, assesses, promotes and integrates the technology with current corporate resources, procedures, and policies.

l. Navy-Wide Software Improvement. Supports NAVDACs goal of achieving more responsive and efficient management of DoN ADP resources. It is aimed at attacking and solving the problem of inefficiencies existing in automated information systems. Increased productivity for both man and machine reduces the requirement for expanded hardware and facilities.

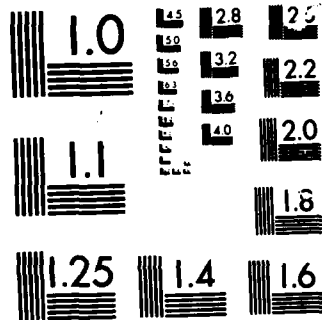
m. Application Software Contract. Designed to assist Navy activities in obtaining application from the private sector. The major support areas are application software umbrella contracts, application software contracts, basic ordering agreements, proprietary application software, and contract assistance.

n. Application Software Standardization and Sharing. Supports the NAVDAC mission to initiate action for the development of standard systems throughout the Navy. The purpose of this program is to improve the efficiency, economy, and readiness of the DoN through more effective management of automated information resources. The goal is to provide functional sponsors and functional managers with a management framework to identify duplications, incompatibilities, and omissions in automated information systems support.

o. ADP Security. This program directly supports DoN goals to reduce vulnerabilities in both mission critical and mission support resources/computer systems in the Navy. This program consists of six projects which together provide a consistent method for ADP security management in Navy activities, platforms and related telecommunications; and that deal directly with modification, destruction, disclosure, denial of service, fraud, waste, and abuse of all types of computer based resources.

p. Configuration Management. This program is directed towards the development of standard systems to supply the data needed for information resources management in the Navy. The program includes collecting and maintaining information and statistics on Navy ADPE inventories; review, analysis and elimination of obsolete ADP hardware; and the development of a decision support system for Navy Data Processing Installation System (DPIS).





MICROCOPY

CHART



Activity Group: Field Operations (Cont'd)

I. Description of Operations Financed. (cont'd)

q. Data Processing Installation Management. Investigate, evaluate, and implement projects directed toward streamlining and ensuring a reliable operations environment. This goal may be accomplished by the implementation of hardware, software, administrative solutions or any combination thereof.

r. Hardware Management. To conduct detailed studies concerning long and short-range DoN-wide non-tactical computer equipment requirements. Based upon the results of these studies, and results of ADP technology assessment projects, actions are initiated to award contracts needed to satisfy projected requirements.

s. Information Systems Third-Party Testing. This program directly supports DoN requirements for test and evaluation efforts dealing with systems security and independent, third-party reviews of Navy information systems. These test and evaluation requirements are in accordance with DoD Life Cycle Management of Automated Information Systems.

t. Performance/Evaluation Management. This program supports two NAVDAC goals, to develop a means of judging the performance of ADP organizations and to achieve more responsible and efficient management of ADPE resources throughout the Navy. The program consists of four projects which support an integrated approach towards establishing and monitoring a performance measurement program for all Navy ADP activities.

u. ADP Technology. Within the ADP Technology programs there are several different initiatives. A database machine prototype is being evaluated for potential use throughout the Navy by users and developers. An office automation prototype will allow evaluation and increased understanding in the area of office automation prior to administering policy and standards to the rest of Navy. Investigation of new software languages for developers as well as unsophisticated end users are being pursued. Workbench technology provides a combination of hardware and software to expedite development of application systems. Through evaluation of UNIX software, expertise will be gained to provide better guidance and support for small system users in Navy.

v. Career Management. Several approaches are being taken to enhance the skills of ADP staffs. Once training requirements common to many activities are identified, courses are developed for classroom or computer aided instruction as appropriate.

Activity Group: Field Operations (Cont'd)

I. Description of Operations Financed. (cont'd)

w. Product Performance Agreement Center The Multi-Service Product Performance Agreement Center (PPAC) located at Wright-Patterson AFB, Ohio will support the Services' needs for a directly accessible, automated system which will provide the capability for users to: (1) conduct the necessary analyses to determine which warranty, guarantee, or other incentive (if any) will most effectively meet their needs, and (2) tailor generic clauses to their unique acquisition program. PPAC will function as a data library to assist in the development of warranties that will fulfill the requirements of Section 2403 to title 10, U.S.C. PPAC is one tool that exists to provide risk and cost benefit models and identification of selection criteria for product performance agreements. Resources under this program provide the Navy's share of the cost to operate this Joint Logistics Command Center.

The Aviation Intermediate Maintenance Support Office (AIMSO) accomplishes numerous technical projects, broad and specific, which address various problems that degrade Intermediate level (I-level) maintenance. Projects address specific I-level logistic element and system problems in order to develop improved management tools and techniques for better utilization of intermediate level resources in support of assigned workload. AIMSO advises CNO and Commandant of the Marine Corps (CMC) on various problems, solutions, and alternative management methods to improve logistic system support for the Intermediate Maintenance Activities (IMA's). Effective FY 1986, AIMSO will be budgeted under Command and Administration by the Naval Air Systems Command.

Specific project and improvement activities are categorized into eight broad areas that support the specific mission of AIMSO.

a. Mobilization. Efforts include the development and maintenance of I-level mobilization plans, establishment of a specific mobilization role for AIMSO, and the Integration of mobilization into all current and future AIMSO efforts.

b. Acquisition. AIMSO's involvement in acquisition is to educate the acquisition process on I-level needs, represent the views of the I-level during the acquisition process, and, on a selective basis, participate in specific acquisition programs.

c. Information. The AIMSO effort within this category is to act as the I-level "clearinghouse" and "crossfeeder." This involves being the central focal point, reporting all efforts accomplished having some application to aviation I-level, and passing good information and ideas to and between all 87 Intermediate Maintenance Activities (IMA's) worldwide.

d. I-level Spokesman. AIMSO represents the I-level of maintenance in the headquarters community and acts as the recognized expert on all I-level matters.

Activity Group: Field Operations (Cont'd)

I. Description of Operations Financed. (cont'd)

e. Operational Support. The most immediate improvement in I-level maintenance comes from AIMSO's ability to identify fleet problems, develop solutions to those problems, and implement the solution or turn over the action to another responsible activity for Institutionalization. The majority of efforts within this category have as their objective, a specific improvement in capability, management practice, use of resources, or specific training.

f. Analysis. To support the requirements of AIMSO, OPNAV, and the Type Commanders (TYCOM's), the capability to properly analyze and evaluate I-level operation is absolutely mandatory. To this end, AIMSO has instituted several efforts which have as their primary objective establishment of this capability.

g. Long-Range Planning. As one of the key requirements of improvement in I-level maintenance, long-range planning focused at the I-level must be accomplished. Efforts to define the role of AIMSO in the planning process and develop I-level long range plans are being pursued. The objective of these efforts is to influence long-range hardware acquisition and operational plans to consider the unique needs of the I-level, and to prepare the I-level for changes in hardware, software and management technology.

h. Naval Aviation Maintenance Program (NAMP). In addition to efforts which support unique I-level requirements, AIMSO has been assigned responsibility for OPNAV Instruction 4790.2C, the NAMP Manual, a 3,000 page document. This responsibility includes preparing, negotiating, and constructing all changes of the document, interpreting the OPNAV policy contained in the document; and distributing the documents to the fleet. In addition, major new programs entering the fleet are evaluated and included in the document.

Operational Support This program provides for the management support of the Office of Naval Technology and its exploratory development program, the Naval Independent Research and Development Program, the Director of Naval Laboratories, and the Office of Chief of Naval Research, Research and Development Centers and Laboratories.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appro- priation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
AIMSO	4,548	5,308	5,340	0	0	0
NAVDAC	22,069	25,321	24,773	24,003	25,729	+1,726
Operational Support	<u>0</u>	<u>0</u>	<u>0</u>	<u>3,220</u>	<u>0</u>	<u>-3,220</u>
Total, Field Operations	26,617	30,629	30,113	27,223	25,729	-1,494

Activity Group: Field Operations (Cont'd)

		<u>Amount</u>
B. <u>Reconciliation of Increases and Decreases.</u>		
1. FY 1986 Current Estimate		\$27,223
2. Pricing Adjustments		1,513
A. Industrial Fund Rates	(1,369)	
B. Other Pricing Adjustments	(144)	
1) Other	144	
3. Program Increases		2,075
A. Other Program Growth in FY 1987	(2,075)	
1) Increased funding in support of the Type Commanders Headquarters Automated Information System (THAIS). In FY 1987 the seven THAIS sites will move to 24 hour a day operations from the present twelve hour a day level. This increase is required to implement the second of three incremental application software releases. This release will, for the first time, provide functional capability in all ten functional areas.	266	
2) Teleprocessing improvements increase supports proposed upgrades to existing networks, improved Local Area Network (LAN) installations, and planned improvements in data communications support.	385	

Activity Group: Field Operations (Cont'd)

C. Reconciliation of Increases and Decreases. (cont'd) Amount

3. Program Increases (cont'd)

A. Other Program Growth in FY 1987 (cont'd)

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 3) Information systems development tools and techniques increase is for support in the area of fourth generation language evaluations.                                                                                                                                                                                                                                                                                                                                                                                          | 23  |
| 4) BASIS increase supports the lease buy out of equipment and additional expense associated with first year development.                                                                                                                                                                                                                                                                                                                                                                                                        | 263 |
| 5) ADP security increase funds two new project starts and expand the level of effort in two on-going projects.                                                                                                                                                                                                                                                                                                                                                                                                                  | 435 |
| 6) The Information systems third party testing program will test and evaluate high dollar value, high risk and widespread use information systems in support of Life Cycle Management limitations and to reduce the potential for fraud waste and abuse. These funds will be used to provide a core of expertise, which is presently unavailable, in the NAVDAC community to concentrate on this effort. A portion of these funds will be used to develop automated tools to support the testing as an independent third party. | 457 |

Activity Group: Field Operations (Cont'd)

C. Reconciliation of Increases and Decreases. (cont'd) Amount

3. Program Increases (cont'd)

A. Other Program Growth in FY 1987 (cont'd)

core of expertise, which is presently unavailable, in the NAVDAC community to concentrate on this effort. A portion of these funds will be used to develop automated tools to support the testing as an independent third party.

- |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |     |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 7)   | Performance Evaluation/<br>Management increase is<br>needed for the<br>development of Computer<br>Performance Management<br>(CPM) tools and<br>guidelines for Navy-wide<br>computer network<br>performance evaluation,<br>reporting and tuning.<br>Lack of these funds will<br>prevent NAVDAC from<br>meeting the CPM related<br>mission goals set forth<br>in OPNAV Instruction<br>5450.200.                                                                             | 130 |
| <br> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |     |
| 8)   | ADP Technology increase is due<br>to the maturity of the<br>Artificial Intelligence<br>(AI) program. NAVDAC<br>expects that constructive<br>application of this<br>technology can be made<br>for the first time in the<br>non-tactical community.<br>The additional funds will<br>be used to purchase an AI<br>programmer generator and<br>1 to 2 persons to use the<br>generator. The first<br>applications are expected<br>to produce systems<br>software which will be | 116 |

Activity Group: Field Operations (Cont'd)

<u>C. Reconciliation of Increases and Decreases. (cont'd)</u>		<u>Amount</u>
3. Program Increases (cont'd)		
A. Other Program Growth in FY 1987 (cont'd)		
used to expedite the currently very costly software systems development process.		
4. Program Decreases		-5,082
A. One Time FY 1987 Decreases	(-3,364)	
1) Realignment of \$3,348 thousand for management support for the Office of Chief of Naval Research to Research, Development, Test and Evaluation, Navy (RDT&E,N) is a result of the disestab- lishment of the Chief of Naval Material.	-3,348	
2) Decrease reflects one time costs to set up PPAC in FY 1986.	-16	
B. Other Program Decreases in FY 1987	(-1,718)	
1) Financial Navy Automated Budgeting System (NABS) reflects a small decrease in computer time.	-5	
2) Architecture in FY 1987 and out-years will require less contractual support by depending more on in-house application of top-level design and established guidelines.	-790	
3) Technical support decrease is a result of program priority changes and the completion of certain developments.	-822	



Activity Group: Field Operations (Cont'd)

C. Reconciliation of Increases and Decreases. (cont'd) Amount

4. Program Decreases (cont'd)

B. Other Program Decreases in FY 1937 (cont'd)

4) Data Processing Installation -101  
(DPI) Management decrease  
is due to the completion  
of two projects in FY  
1986.

5. FY 1987 President's Budget Request \$25,729

III. Performance Criteria (\$000)

	<u>FY 1935</u>	<u>FY 1936</u>	<u>FY 1937</u>
A. Naval Data Automation Command	\$ 22,069	\$ 24,003	\$ 25,329
FINANCIAL	319	97	98
THAIS	5,166	5,334	5,909
ARCHITECTURE	0	1,444	738
BASES/STA COMM SUPP	895	1,027	1,086
DDN IMPLEMENTATION	497	772	817
INFO SYS STDS MGMT	1,250	1,117	1,182
TECHNICAL SUPPORT	3,619	4,287	3,714
TELEPROCESSING IMPRV	900	1,500	1,972
UMBRELLA CONTRACTS	367	313	331
INFO SYS DEV TOOLS & TECH	388	527	581
NAVY-WIDE S/W IMPRV PROG	637	415	439
APPLICA S/W UMBR CON	406	210	222

Activity Group: Field Operations (Cont'd)

III. Performance Criteria (\$000) (cont'd)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Naval Data Automation</u> <u>Command</u> (cont'd)			
BASIS	2,249	1,796	2,163
APPL S/W STD & SHARING	280	247	261
ADP SECURITY	1,018	1,065	1,562
CONFIGURATION MGMT	842	1,009	1,068
DPI MANAGEMENT	482	330	248
HARDWARE	762	570	603
INFO SYS 3RD PARTY TST	0	0	457
PERF/EVAL MGMT	1,062	981	1,168
ADP TECHNOLOGY	735	486	630
CAREER MANAGEMENT	195	76	80
PPAC	0	400	0

<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Number of <u>Projects</u>	Number of <u>Projects</u>	Number of <u>Projects</u>
<u>\$000</u>	<u>\$000</u>	<u>\$000</u>

B. Aircraft Intermediate  
Maintenance Support  
Office

\$4,548

MOBILIZATION	2	182
OPERATIONAL SUPPORT	14	1,503
ANALYSIS	5	809
LONG-RANGE PLANNING	1	60
NAMP	3	246
FIXED OPERATION EXPENSES		1,748

<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Work <u>Years</u>	Work <u>Years</u>	Work <u>Years</u>
<u>\$000</u>	<u>\$000</u>	<u>\$000</u>

C. Chief of Naval Research

\$3,220

DNL MANAGEMENT HEADQUARTERS	36	1,775
EXPLORATORY & DEVELOPMENT and ENERGY MANAGEMENT	11	625
ADMINISTRATIVE SUPPORT, INSPECTION GROUP & SECURITY	9	405
RENT & OTHER SUPPORT COST		415

IV. Personnel Summary.

There are no Military or Civilian End Strength or Workyears assigned to this activity group.

70485

Department of the Navy  
Operation & Maintenance, Navy

Activity Group: Maintenance of Real Property  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Chief of Naval Operations (CNO) (OP-09B)

I. Description of Operations Financed.

Maintenance and Repair of Real Property - Includes expenses specifically identified for maintenance and repair of facilities dedicated to support of the Military Personnel and Tenants of the eight Office of Chief of Naval Research (OCNR) Research and Development Centers (Naval Underwater Systems Center (NUSC), Naval Air Development Center (NAVAIRDEVCEN), David Taylor Naval Surface Research and Development Center (DTNSRDC), Naval Surface Weapons Center (NAVSWC), Naval Coastal Systems Center (NAVCOASTSYSCEN), Naval Weapons Center (NAVWPNCEN) Naval Ocean Systems Center (NAVOCEANSYSCEN), and Naval Research Laboratory (NRL).

Minor Construction - Includes expenses specifically identified and measurable to minor construction in support of the military personnel of the eight OCNR R&D Centers.

This program also provides maintenance and minor construction of buildings, structures, grounds, and utility systems required for the Aircraft Intermediate Maintenance Support Office (AIMSO) to perform its mission. Effective FY 1986, AIMSO will be budgeted under the Naval Air Systems Command.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1985</u>	<u>President's</u>	<u>FY 1986</u>	<u>Current</u>	<u>FY 1987</u>	
		<u>Budget</u>	<u>Appropriation</u>	<u>Estimate</u>	<u>Budget Request</u>	<u>Change</u>
Maintenance & Repair of Real Property	18	21	21	0	1,875	+1,875
Minor Construction	<u>0</u>	<u>75</u>	<u>75</u>	<u>0</u>	<u>1,159</u>	<u>+1,159</u>
Total, Maintenance of Real Property	18	96	96	0	3,034	+3,034

Activity Group: Maintenance of Real Property (Cont'd)

<u>B. Reconciliation of Increases and Decreases.</u>		<u>Amount</u>
1. FY 1986 Current Estimate		\$0
2. Functional Transfers		3,034
A. Transfer In	(3,034)	
1) Inter-Appropriation	3,034	
a) Transfer of \$3,034 thousand Base Operations Support for eight Research and Development (R&D) Centers as a result of realignment of R&D costs to O&M,N.		
3. FY 1987 President's Budget Request		\$3,034

<u>III. Performance Criteria.</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Maintenance of Real Property			
Backlog, Maint/Repair (\$000)			
Total Buildings (KSF)	15		9,287

IV. Personnel Summary.

There are no military or civilian personnel assigned to this Activity Group.

Department of the Navy  
Operation & Maintenance, Navy

Activity Group: Base Operations  
Budget Activity: 7 - Central Supply and Maintenance  
Claimant: Chief of Naval Operations (CNO) (OP-09B)

I. Description of Operations Financed.

Provides for operations support for the Aircraft Intermediate Maintenance Support Office (AIMSO) and the Military Personnel and Tenants of the eight Office of Chief of Naval Research (OCNR) Research and Development Centers (Naval Underwater Systems Center (NUSC), Naval Air Development Center (NAVAIRDEVCEN), David Taylor Naval Surface Research and Development Center (DTNSRDC), Naval Surface Weapons Center (NAVSWC), Naval Coastal Systems Center (NAVCOASTSYSCEN), Naval Weapons Center (NAVWPNCEN) Naval Ocean System Center (NAVOCEANSYSCEN), and Naval Research Laboratory (NRL)). Effective FY 1986, AIMSO base operations support will be budgeted by the Naval Air Systems Command.

Operations of Utilities. Electricity, water, sewer, and heat are generated by some Centers and purchased from local utilities or PWC's by other Centers.

Base Communications. Includes cost for administrative telephones, telecommunications centers, industrial security networks, and paging networks.

Other Base Services. Includes expenses for miscellaneous base support functions (other than Public Works functions) not otherwise included in other functional categories. Typical of such expenses are port service and operations, shore-base general, air operations, and training.

Other Engineering Support. Engineering services, custodial services, refuse/garbage collection and disposal, snow removal, and fire protection and firefighting.

Other Personnel Support. Provides for mess halls, sales activities and laundry facilities.

Morale, Welfare, and Recreation. Provides authorized appropriated fund support for shore-based recreation activities.

Activity Group: Base Operations (Cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Operations of						
Utilities	22	29	29	0	1,452	+1,452
Base Communications	11	19	19	0	0	0
Other Base Services	0	0	0	0	4,705	+4,705
Other Engineering						
Support	10	14	14	0	0	0
Other Personnel						
Support	0	0	0	0	1,284	+1,284
MWR	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,742</u>	<u>+1,742</u>
Total, Base Operations	43	62	62	0	9,183	+9,183

B. Reconciliation of Increases and Decreases.

Amount

1. FY 1986 Current Estimate \$0
2. Functional Transfers 9,183

A. Transfers-In

(9,183)

1) Inter-Appropriation

9,183

- a) Transfer of \$9,183  
thousand Base Operations  
Support for eight Research  
and Development (R&D)  
Centers as a result of  
realignment of R&D costs  
to O&M,N.

3. FY 1987 President's Budget Request

\$9,183

III. <u>Performance Criteria.</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Base Operations (\$000)	43	0	9,183
Operation of Utilities (\$000)	22	0	1,452
Total Energy Consumed (MBTU's)	673	0	28,782
Total Non-energy Consumed (K Gal)	1,422	0	32,520
Base Communications (\$000)	11	0	0
Number of Instruments	53	0	0
Number of Mainlines	10	0	0
Ownership Operations (\$000)	10	0	0
Other Engineering Support (\$000)	10	0	0
Other Base Services (\$000)	0	0	4,705
Morale, Welfare and Recreation	0	0	1,742
Other Personnel Support	0	0	1,284

IV. Personnel Summary.

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Military</u>	<u>14</u>	<u>      </u>	<u>      </u>
Officer	1		
Enlisted	13		

Department of the Navy  
Operation & Maintenance, Navy  
Exhibit OP-05

Activity Group: Command and Administration  
Budget Activity: 7 Central Supply and Maintenance  
Claimant: Assistant for Administration to the Under Secretary of the Navy

I. Description of Operations Financed.

Resources within this Activity Group finances acquisition support functions. This includes contracting, business management, business strategy, overseeing competitive procurement methods, acquisition procedures, policy for acquisition specification streamlining, productivity enhancement, value engineering, policy for reliability and quality assurance standards.

There are five major initiatives to be funded:

Navy Overhead Should Cost Program - A DEPSECDEF directed program to review the costs related to acquisition of major systems. Primarily intended to identify and challenge uneconomical and inefficient practices in the contractor's management and control of overhead costs.

Navy Competition Program - An ongoing program to increase competition by reducing the number and value of noncompetitive contracts, identifying and removing barriers to full and open competition, and emphasizing competition in areas such as acquisition training and research.

Acquisition Streamlining - Initiative to eliminate noncost effective contract requirements, improve the acquisition process and incorporate use of commercial standards. Some of the work funded will be that of technical effort on the part of nonpartisan, industrial societies and committees to resolve technical problems.

Product Performance Agreement Center (PPAC) - A Joint Logistic Commanders (JLC) approved program. It will provide a data library to assist in the development of warranties that will fulfill the requirements of Title 10, USC, section 2304. PPAC is one tool that exists to provide risk and cost benefit models and identification of selected criteria for product performance. This is a joint program and the funds requested are only the Navy's portion.

Reliability, Maintainability and Quality Assurance (RM&QA) Initiatives - SECNAV supported tasks centered around the implementation of DoD Directive 4245.7, resulting in improved Fleet Readiness. Entails technical investigations into solutions to design and manufacturing engineering problems that plague Navy Acquisition Program.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986</u> <u>Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987</u> <u>Budget Request</u>	<u>Change</u>
Command and Administration	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>\$9,910</u>	<u>\$9,910</u>
Total Command and Administration	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>\$9,910</u>	<u>\$9,910</u>



Activity Group: Command and Administration (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1986 Current Estimate

2. Program Increases \$9,910

A. Other Increases (9,910)

- 1) Navy Overhead Should Cost Program - primarily planned to identify and challenge uneconomical practices in the management and control of overhead (indirect) costs. 2,910
- 2) Competition Advocacy Program - provides input to the annual report on competition; identifies activities and accomplishments during the fiscal year; specifies new ideas or initiatives to increase competition and identifies remaining competition barriers; and performs the in-depth research necessary to address all the elements of the Navy's competition efforts. 500
- 3) Acquisition Streamlining Program - provides for (1) tailoring of overall Navy contract specification base, (2) conversion of military specifications to commercial specifications, (3) funding industry to participate in improving the specification base for Navy, (4) review of Navy acquisition process, development of changes with Government and Industry involvement, (5) educate and communicate acquisition streamlining principles. 5,150
- 4) Product Performance Agreement Center - provides support for an accessible, automated system to enable users to conduct analyses of warranty or guarantee data and tailor generic contract clauses to unique acquisition programs. This funding is the Navy's share of a DOD directed multi-service effort. 400
- 5) Reliability, Maintainability and Quality Assurance (RM&QA) - provides basic technical support to (1) develop documents establishing DOD and DON policy for transition from development to production, (2) develop Best Practices Manual to give industry guidelines for manufacturing excellence, (3) develop documents to give design guidelines for specific areas such as power supplies, and (4) coordinates Industry Motivation Award Program. 950

3. FY 1987 President's Budget Request \$9,910

III. Performance Criteria.

This program supports comprehensive, centrally-managed efforts to lower Navy acquisition costs by significantly increased efforts to identify and correct inefficient and not cost-effective acquisition management practices. There are five major initiatives funded under this Activity Group:

A. Navy Overhead Should Cost Program: \$2,910

This initiative provides in-depth review of contractor's management and control of overhead cost. This comprehensive effort is critical considering that overhead costs represent the major portion of the total price of all defense contracts. During FY 1985 two overhead should cost reviews were accomplished utilizing Navy civilian and military personnel specifically assigned on a one time tasking from other full time duty. The planned FY 1987 should cost review effort will be accomplished by using contract effort to augment available in-house Navy personnel in specialized skill areas. The FY 1987 plan is for five overhead should cost reviews each of about four months duration and each requiring approximately 40 personnel. It is planned that more than half of the required resources will be provided by detailing Navy personnel.

B. Navy Competition Program: 500

This initiative reduces cost of Navy acquisitions by: 1) eliminating barriers to full and open competition; 2) analyzing the Navy contract competition performance by industry and weapons system; and 3) providing training for managers on the "when" and "how" to introduce competition. In accomplishing these objectives, the Competition Advocate relies to the maximum extent possible on the various levels of expertise within the Navy and the Department of Defense. However, in the areas of market behavior, industry analysis and economic modeling, the required level of expertise resides primarily in the commercial sector. Effort from outside Navy is primarily obtained through the Logistics Management Institute.

Specific Performance Efforts-

- Provide input to an annual report on competition as required by the Competition in Contracting Act.
- Identify and report on competition activities and accomplishments during the fiscal year.
- Specify new initiatives to increase competition.
- Identify remaining barriers to competition.

Activity Group: Command and Administration (cont'd)

III. Performance Criteria (cont'd)

C. Acquisition Streamlining:

5,150

Acquisition Streamlining provides simplified and updated acquisition documents and procedures to reduce the time and cost required to obtain quality weapons systems, facilities and equipment.

Specific Performance Efforts-

- Specification Improvement (\$3,950)
  - Specification Update (2,000 documents)
  - Commercial Conversion (410 documents)
  - System Tailoring (40 systems packages)

Specification Improvement provides a specification base that is current, technologically correct, and tailored to the requirement to eliminate non-cost-effective contract documents.

- Acquisition Improvement (\$1,200)
  - Technical Reviews (20 reviews)
  - Streamline Training (84 workshops)

Acquisition Improvement provides new ideas on initiatives to improve acquisition work-force and procedures; identifies barriers to acquisition improvement; and performs in-depth research necessary to improve the acquisition process.

D. Product Performance Agreement Center (PPAC)

400

This initiative provides the Navy's support for the multi-service PPAC located at Wright-Patterson AFB, Ohio. The objective of PPAC is to lower acquisition costs by providing a directly accessible, automated data library and cost benefit models to be used in the development of selection criteria for product performance evaluations and warranty agreements between Government and industry.

Specific Performance Efforts-

- PPAC will provide a capability for users to conduct the necessary analyses to determine which warranty, guarantee, generic contract clause or other incentive (if any) will most effectively meet their specific requirement.

Activity Group: Command and Administration (cont'd)

III. Performance Criteria (cont'd)

E. Navy Reliability, Maintainability and  
Quality Assurance (RM&QA)

950

The objective of this initiative is to decrease acquisition costs, reduce weapon system support costs, and increase levels of reliability and maintainability of equipments and products. The implementation of this initiative requires close liaison and the cooperation of industry in raising the quality of products manufactured for the Navy. This program entails technical investigations into solutions to design and manufacturing engineering problems that plague Navy acquisition programs. Similar RM&QA initiatives directed to designing quality into Naval systems have resulted in improving fleet readiness from an estimated 30% in FY 1985 to an estimated 75% in FY 1985.

Specific Performance Efforts-

- Providing extensive basic technical support essential to accomplishment of Navy the RM&QA mission.
- Development of significant RM&QA deliverable documents establishing DOD and DON policy for areas such as:
  - Transition from Development to Production.
  - Best Practices Manual to give industry proven guidelines for manufacturing excellence.
  - Documents to give design guidelines for specific areas such as power supplies and special electric circuits.

IV. Personnel Summary (End Strength)

Not Applicable

Department of the Navy  
Operation and Maintenance, Navy  
Exhibit OP-5

Activity Group: Field Operations

Budget Activity: 7-Central Supply and Maintenance

Claimant: Assistant for Administration to the Under Secretary of the Navy

I. Description of Operations Financed.

The Naval Center for Cost Analysis is a field activity supporting the Assistant Secretary of the Navy for Financial Management in his role as the DON policy official for cost analysis. The Center's mission is to ensure the preparation of credible cost estimates of the resources required to develop, procure and operate military systems and forces in support of planning, programming, budgeting and acquisition management. The funds requested represent the cost of compensation for the civilian professional and clerical work force; the cost of providing administrative support such as travel, office supplies and equipment for military and civilian personnel assigned to the Center; the cost of engineering cost analysis support provided by Naval Laboratories and the Naval Avionics Center; and the cost of Contracted Advisory and Assistance Services (CAAS) in support of special cost analyses and studies such as Warranty Cost Benefit Analysis and overhead should cost studies.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987 Budget Request</u>	<u>Change</u>
Field Operations	\$2,414	0	0	\$3,686	\$2,449	-\$1,237
Total O&M,N	\$2,414	0	0	\$3,686	\$2,449	-\$1,237

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1986 Current Estimate		\$3,686
2. Pricing Adjustments		37
A. Other Pricing Adjustments	(37)	
3. Functional Program Transfers		-1,253
A. Transfers Out	(-1,253)	
1) Intra-Appropriation		
a) Transfer of twenty civilian end strength and associated funds to Administration and Associated Activities (Budget Activity, 9). Resources will provide funding to accomplish financial management and other fiduciary responsibilities associated with the disestablishment of the Naval Material Command (NAVMAT).		
	-1,253	
4. Program Decreases		-21
A. Other Program Decreases in FY 1987	(-21)	
1) Reduction in various support and overhead cost categories as a result of the above mentioned transfer.		
	-21	
5. FY 1987 President's Budget Request		\$2,449

III. Performance Criteria

System independent cost estimates were completed in support of DOD Cost Analysis Improvement Group, Defense Systems Acquisition Review Council (DSARL), or Department of Navy Systems Acquisition Review Council (DNSARL) reviews.

Five should cost analyses were completed in support of the ASN (Shipbuilding & logistics) role in Navy Acquisitions.

Over 160 cost assessments were completed on CNO Executive Board major and minor programs in support of CNO Executive Board (CEB), Acquisition Review Council, (ARC), Ships Characteristics Improvement Board (SCIB) and other management decision forums.

Activity Group: Field Operations (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Ten major programs are being studied to assess the effects of competition on costs.

Cost research programs were initiated in three major areas: data bases, new methodology, and acquisition policy.

For FY 1986 and FY 1987 the Center plans to :

- Complete approximately 30 independent cost estimates/should cost analyses each year in support of the Planning, Programming, Budgeting and Acquisition process.
- Continue to provide cost assessments for major and minor programs in support of CEB's, ARC's, SCIB's and other management decision forums.
- Complete competition case studies on ten major weapon systems programs.
- Continue to direct the cost research program in an effort to improve the analysis procedures used to project the life cycle costs of ships, aircraft, missiles and electronic systems and their major subsystems and components.

IV. Personnel Summary (End Strength)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
A. <u>Civilian</u>	<u>29</u>	<u>49</u>	<u>29</u>
USDH	29	49	29

Department of the Navy  
Operation and Maintenance, Navy  
Exhibit OP-5

Activity Group: Industrial Preparedness

Budget Activity: 7-Central Supply and Maintenance

Claimant: Assistant for Administration to the Under Secretary of the Navy

I. Description of Operations Financed.

Section 1536 of the Department of Defense Authorization Act, 1985, established a Commission on Merchant Marine and Defense. The Commission will be composed of the Secretary of the Navy, Administrator of the Maritime Administration and five individuals appointed with the advice and consent of the Senate. The Commission shall study problems relating to transportation of cargo and personnel for national defense purposes in time of war or national emergency, the capability of the United States Merchant Marine to meet the need for such transportation, and the adequacy of the shipbuilding mobilization base of the United States to meet the needs of naval and merchant ship construction in time of war or national emergency. Based on the results of the study, the Commission shall make such specific recommendations, including recommendations for legislative action, action by the executive branch, and action by the private sector, as the Commission considers appropriate to foster and maintain a United States Merchant Marine capable of meeting national security requirements. The recommendations of the Commission shall be provided in the reports of the Commission due August 15, 1986 and August 15, 1987. The resources under this activity support the mission accomplishment of the Commission on Merchant Marine and Defense.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

		FY 1986			FY 1987	
	FY 1985	Budget Request	Appro- priation	Current Estimate	Budget Request	Change
Industrial Readiness	\$ 0	\$ 0	\$850	\$850	\$650	-\$200
Total O&M,N	\$ 0	\$ 0	\$850	\$850	\$650	-\$200



Activity Group: Industrial Preparedness (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1986 Current Estimate		\$ 850
2. Pricing Adjustments		17
A. Other Pricing Adjustments	(17)	
3. Program Decreases		-217
A. Other Program Decreases in FY 1987	(-217)	
1) Phase down of program as final recommendations are prepared for the President and the Congress.	-217	
4. FY 1987 President's Budget Request		\$ 650

III. Performance Criteria and Evaluation      FY 1985    FY 1986    FY 1987

Not later than May 15, 1986 and May 15, 1987, the Commission shall submit to the President and to Congress a report containing its findings of fact and conclusions. Not later than August 15, 1986 and August 15, 1987, the Commission, based upon those findings and conclusions, shall prepare a report containing the recommendations of the Commission to the President and Congress.

IV. Personnel Summary

Not Applicable

Department of the Navy  
Operation and Maintenance, Navy  
Exhibit OP-05

Activity Group: Naval Industrial Fund and Stock Fund Support  
Budget Activity : 7 - Central Supply and Maintenance Activities  
Claimant: Chief of Naval Operations (OP-92)

I. Description of Operations Financed.

This activity group includes: (a) funding to reimburse DOD Industrial fund and Stock fund costs not recovered through customer rates, (2) refunds from Industrial Fund and Stock Fund where applicable..

DOD Industrial Funds and Stock Funds operate under a rate stabilization policy established by the Secretary of Defense. Financial resources requested in various appropriated fund customer programs reflect the impact of approved stabilized rates. Changes to established rates are disruptive to both customer program and Industrial Fund and Stock Fund operations. The Department executes its programs at established stabilized rates with additional reimbursement to passthrough, or refunds from Industrial Fund and Stock Fund, as appropriate.

The Committees on Appropriations are familiar with the Department's price stabilization policy. The Committees are cognizant of the fact that the Department will continue to execute programs at published prices and provide refunds to customer accounts.

II. Financial Summary:(Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1985</u>	<u>Budget Request</u>	<u>FY 1986</u> <u>Appropriation</u>	<u>Current Estimate</u>	<u>FY 1987</u> <u>Budget Request</u>	<u>Change</u>
Stock Fund Reimbursement (Nonfuel)	-150,000	-	-732,400	-732,400	-413,000	+319,400
Stock Fund Reimbursement (Fuel)	-352,700	-	-148,850	-148,850	-	+148,850
Naval Industrial Fund Rebates	-84,000	-280,300	-420,300	-420,300	-310,700	+109,600
General and Special Program Support	<u>9,800</u>	<u>-</u>	<u>227,100</u>	<u>227,100</u>	<u>-101,777</u>	<u>-328,877</u>
Total	-576,900	-280,300	-1,074,450	-1,074,450	-825,477	+248,973

Activity Group: 7 - Navy Industrial Fund and Navy Stock Fund Support (Cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1986 Current Estimate	-1,074,450
2. Pricing Adjustments	248,973
A. Stock Fund	(468,250)
1) Fuel	+319,400
2) Non-Fuel	+148,850
B. Industrial Fund	(-219,277)
1) NIF Pay Raise	-48,577
2) NIF Refund Excess Surcharge	-40,000
3) NIF refund SAAM	-18,000
4) NIF Refund Economic Assumptions	-71,500
5) Industrial Fund Rate	+140,000
6) Retained Earnings	-181,200
3. FY 1987 President's Budget Request	-825,477

III. Performance Criteria

None for this activity.

IV. Personnel Summary ;

None for this activity.

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